Squadron, explained, on February 22, that when she passed undetected through our lines on December 24–25, he had only six of the twenty-three vessels under his command available for patrol work, a situation partly due to delays in refitting caused by a strike of boilermakers at Liverpool.¹

The Yarrowdale, on her arrival at Swinemunde, was renamed Leopard, and was quickly converted into a German man-of-war. Equipped with an armament of concealed guns and torpedo tubes, heavy enough to make her a formidable opponent for any armed merchant cruiser or boarding steamer she might encounter, she sailed from Germany during the second week in March 1917. Her captain was Commander Hans von Lassert,² but the nature of his orders we do not know.

Just about the time that the Leopard set out on her cruise, Admiral Fremantle issued³ orders to the 2nd Cruiser Squadron to patrol a line joining a position in latitude 61° 45′ N., and longitude 1° W., 50 miles north of the Shetlands, to a second position 180 miles due north of it. The line was to be divided into three sections, each 60 miles long.⁴ On the 16th the Achilles (Captain F. Martin Leake), and the Dundee (Commander S. M. Day, R.N.R.) were patrolling the northern section of the line, when, shortly before noon,⁵ in a position in latitude 64° 42′ N., and longitude 0° 56′ W., they sighted a steamer to the eastward, steering E.N.E., about nine miles off. It was a typical March day, cold, bleak and cheerless. Heavy snow and rain clouds scurried north-westward before a strong south-easterly wind, and every now and then the dipping bows of the Achilles would throw up over her bridge a sheet of icy spray, colder than the snow itself.⁵

When Captain Martin Leake sighted the steamer he turned towards her, and, ordering the *Dundee* to follow, closed her at 15 knots. After an hour's steaming, however, he found that he had gained but little, and increased to 18 knots.

At 2.0 p.m., the Achilles had drawn sufficiently close to order the steamer to close the Dundee which by then had fallen astern. At 2.35 p.m., she was ordered to stop, and Captain Leake told the Dundee to drop a boat and examine her. By this time Commander Day was acutely suspicious. The steamer was flying the Norwegian flag and called herself Rena. A Norwegian steamer of this name

1 M.02376/1917.

certainly appeared in Lloyd's Register, but she was a vessel of 2,885 tons and Commander Day estimated the tonnage of the stranger to be nearer 7,000.1

Furthermore, he could not understand why the N's in Rena and Norge were painted upside down on her port side. He noticed too, that all superfluous woodwork had been removed, and that she had no wireless; moreover, she had maintained a steady 13 knots for over two hours, a speed beyond the powers of the real Rena. He communicated his suspicions to his first lieutenant, Lieutenant F. H. Lawson, R.N.R., who, knowing that the boarding officer lacked experience, at once volunteered to take charge of the boarding boat, an act of deliberate self-sacrifice that was to cost him his life. Shortly before three o'clock, Lieutenant Lawson and his party2 rowed across to the Rena and were soon lost to sight under her lee side. While he waited for some sign from the boarding party, Commander Day noticed that the stranger kept constantly working her engines as though trying to out-manœuvre him, and he, in turn, manœuvred his ship to keep on her quarter. The guns' crews in the Dundee were closed up ready for action with guns trained on the target. Some fifty minutes had passed when suddenly, at 3.40 p.m., the large Norwegian flag, painted on the Rena's port quarter, fell outboard with a loud crash. Commander Day waited no longer, and, giving the order to open fire, ordered "half speed ahead" so as to keep astern of the enemy. Almost as he did so two torpedoes came from her in quick succession passing only 20 to 30 yards astern of the Dundee.

The Achilles was then, at 3.40 p.m., some three and a half miles to the north-eastward, and the enemy, a thousand yards to the south-westward, was heading south-west and slewing rapidly to port. Commander Day steered across her stern, dodging her dangerous broadside, and raking her fore and aft with his own four-inch guns at almost point blank range. Every one of the forty-four 4-inch and twenty-five 3 pounder shells fired by the Dundee scored a hit, and the enemy, who had so far not fired a single round, was soon enveloped in a dense cloud of smoke and steam. At 3.47 p.m., Commander Day, finding himself to the north-westward of the raider and almost obscured by the thick cloud of smoke drifting down wind from her. turned north-west and steamed at full speed down the lane of smoke, clearing the range for the Achilles, on his starboard beam. As he sped away, Commander Day raked the enemy again with his after 4-inch gun and, in spite of the smoke, so excellent was the shooting that nearly every round got home. He continued firing until his ammunition gave out, about half an hour later. The Achilles had been firing steadily since 3.45 p.m., and the enemy, though she

² Mittler "Halbstocks die Flagge," 43.

³ On March 11. See Section 22.

⁴ H.S.A. 344/517.

⁵ At 11.45 a.m.

⁶ Weather at the time being wind south-easterly, force 4 to 5, snow and rain squalls, sea moderate. H.S. 875/69.

¹ Actual tonnage was 4,652.

² Four of the five seamen making up the party were named Anderson. H.S. 875/84.

continued to fight with her one remaining gun, was a mass of flame, and clearly doomed. Early in the action the *Dundee* had sighted, near the stricken vessel, what she took to be a submarine, but which was possibly her own boarding boat, and at 3.55 p.m. Commander Day reported it to Captain Martin Leake. For twenty minutes after the *Dundee* ceased firing at 4.15 p.m., the raider stood up to a fearful hail of 7.5 and 9.2 shells from the *Achilles* until at 4.35 p.m., battered into a blazing furnace, she listed to port and disappeared.

Captain Day's next anxiety was for his missing boarding party, but the reported presence of an enemy submarine, precluded any

attempt to pick up possible survivors.

Both Captain Martin Leake and Commander Day stated that the enemy fought throughout the action under Norwegian colours. In the heat of the action this may have happened, but, if so, it was almost certainly unintentional. It could have fulfilled no object and it is hard to believe that the men who fought so bravely would have intentionally gone to their deaths under a foreign flag. The presence of the Achilles had rendered the position of the raider hopeless from the very outset, but for more than an hour von Lassert and his men stood up to a fearful battering without making any signs of surrender, and it can be said that the end of this erstwhile British steamer, was as glorious as that of any vessel destroyed during the war,³ and in that glory the brave men of the Dundee's boarding party had a greater share. (Plan 25.)

197. "J.1" and H.M.S. "Orpheus," March 19.—The question of an instantaneous recognition signal for British submarines raised by the attack on G.12 on March 15, was discussed shortly afterwards at a meeting between the 1st Lord and the Sea Lords.

The very day of the discussion, March 19, its need was again emphasised by another encounter between a British destroyer and submarine. At 1.30 p.m., J.1, in a position in latitude 55° 44′ N., 0° 32′ W., 5 and on her way to her patrol area off Utsire, 6 fired a torpedo at an enemy submarine on the surface and missed. An hour later, she sighted some British minesweepers screened by the destroyers Rival and Orpheus and reported the presence of the enemy submarine to the Rival. The destroyers had been in sight for about an hour when the Orpheus suddenly fired four rounds at J.1, at a range of only a few hundred yards, narrowly missing her

bridge, though 1.1 at the time had her wireless mast up and was flying a large white ensign. She at once hoisted the challenge and reply and made the recognition signal. but the Orpheus, approaching her from leeward at high speed, saw neither her ensign nor her water jet. She had not observed the Rival signalling to 1.1, and was totally unaware of the presence of a British submarine. Commenting later on the incident. Admiral Beatty expressed the opinion that, pending the introduction of an efficient recognition signal, submarines should regard their own safety as of more importance than the communication of intelligence to friendly surface vessels.2 This view was upheld by the Admiralty, who, on March 19, commenting on the attack on G.12, pointed out that it had always been accepted that the first consideration must be the safety of our surface vessels. and, in the case of our patrols, freedom of instant action. The existing arrangement by which the onus of keeping clear rested on the submarines was, therefore, a sound and logical one. Certain recognition signals, however, were being devised, but whatever signals might be established, the responsibility for keeping clear must remain with the submarines.3 It was evidently not thought desirable to use a code signal to inform vessels in any area of the approach or vicinity of friendly craft.

198. The "Copenhagen" Sunk, March 5. - Meanwhile, on March 5. an incident had occurred in the south which reduced to some extent the work of the Harwich Force. Ever since October 12, 1916. two or three Harwich destroyers had been employed at regular intervals of about a week in the escort of the fast steamer Copenhagen. carrying Foreign Office despatches to and fro between Harwich and the Hook of Holland. For nearly five months this small steamer4 and her escort had passed safely on the double passage. At 4 a.m. on March 5, 1916, she left Harwich on one of her routine trips escorted by the destroyers Sylph and Minos. A heavy sea⁵ running outside reduced the speed of the two destroyers and soon they had dropped astern of their charge. At 7.20 a.m. a heavy sea striking the bridge of the Sylph caused further delay and the Copenhagen passed completely out of her sight. About an hour later the Copenhagen passed the North Hinder Light Vessel and was nine miles E. by N. from it and making for the Maas when, at 8.45 a.m., in 52° 9 N., 2° 54' E., an explosion tore a large hole in her port side. The Minos, on the horizon far astern, seeing great clouds of steam arising from her. hurried up to ascertain the cause, and finding that she had been torpedoed passed round her stern. No sooner had she done so than she, too, saw a torpedo approaching, but avoided it by a quick turn

¹ The C.-in-C. thought that this was probably a cask. See H.S. 875/487. The boarding boat was picked up by the Norwegian S.S. Solborg in 65° 12′ N., 6° 50′ E. at 8.30 p.m., June 6, 1917. H.S.A. 149/332.

² In 64° 54' N., 0° 22' E. H.S. 875/70.

³ H.S. 875/66ff. H.S.A. 344/40ff. H.S.A. 149/290ff.

⁴ M.04320/17.

^{5 100} miles east of Berwick,

⁶ Area C.C.

¹ H.S. 627/46.

² H.S. 627/219ff.

³ M.04320/17.

^{4 2,500} tons.

Wind E.S.E. 6 to 7. Sea 5 to 6.

of the helm. Owing to the heavy sea she had lashed her depth charges and could make no attack on the submarine. Assistance was at hand. The Nimrod, with a destroyer division which had put to sea ready to act as a reinforcement, came up, and her destroyers took off some of the crew. The Sylph, too, arrived soon after, and going alongside took off forty-seven survivors. Shortly after 10 a.m. the destroyers returned to their base. The Copenhagen was still affoat when last seen and remained afloat for some hours, but the weather was too bad for any attempt at salvage. No other steamer took her place, and Commodore Tyrwhitt was thus relieved of the necessity of providing the escorts that had accompanied her through the winter months.1

199. Nineteen Harwich Destroyers permanently transferred to Dover, March.—On December 8, 1916, Commander Edward R. G. R. Evans had written to the Vice-Admiral, Dover Patrol, pointing out that H.M.S. Broke, the vessel under his command, was likely to prove no match for the German destroyers that had been encountered on the Belgian coast. This letter gave rise to much discussion at the Admiralty, and on December 25, Commodore (T) was informed that it had been decided to detach eight "M" class destroyers from the Tenth Flotilla, Harwich Force, for permanent service under the orders of the Vice-Admiral, Dover Patrol. The transfer was to be made as new destroyers became available for service in the Tenth Flotilla. When completed the Tenth Flotilla were to receive four new destroyers, and a second group of eight more "M" class from Harwich were then to be allocated to the Dover Patrol. On the arrival at Dover of the tenth and eleventh destroyers, the Lapwing and Phænix were to be transferred from Dover to Devonport, and on the arrival of the twelfth, thirteenth, fourteenth, fifteenth and sixteenth destroyers, the Porpoise, Paragon, Victor, Unity and Ambuscade were to join the 4th Flotilla at Portsmouth.

The expressed intention of the Admiralty was that the Dover Patrol should eventually consist of 16 "M" class destroyers, 11 "F" class (Tribal), 11 older destroyers, 5 "P" class (patrol boats). and 3 torpedo boats (late coastals).2 The Broke was to remain in the patrol, and the arrangement, already made, for the Faulknor to be added to it was to hold good.3

On February 28, 1917, therefore, 11 "L" class destroyers were transferred from Harwich to Dover by Admiralty order, among them being the Laforey, Laertes and Llewellyn,4 and on the same day

1 M.02736/17, also H.S. 247/85.

the Moorsom, which was refitting in the Humber, also joined Admiral Bacon's command, bringing the total number of "M" class destroyers transferred to Dover up to this date to seven.1

199A. Loss of "E.5" about March 6.—Commodore (S) had to report in March the sad loss of E.5 (Lieutenant-Commander Harrington Edwards, D.S.O., R.N.). She sailed on March 4 to cruise between the Ems and Ameland, and E.29 thought she saw her some 7 miles N. of Juist Island in the afternoon of March 6. On March 7. at 8.10 a.m., the Seydlitz and some torpedo boats sighted a submarine in this area and dropped depth charges without any result. A couple of hours later the Regensburg sighted a submarine a little farther east. This area was not far off the deep mines of the German field off the West Ems, and it is to this field that Marine-Archiv thinks E.5 fell a victim.2 Nothing more was ever seen of her.

200. The "Skate" Torpedoed, March 12.—Eight days after the loss of the Copenhagen the Harwich destroyers Skate, Setter, Minos, Northstar and Lennox sailed to safeguard the eastbound steamers of the "Dutch Traffic," At 4.26 p.m. that afternoon, March 12, Commodore (T) learnt that the Skate had been torpedoed at 3.30 p.m. near the Maas Light Vessel. She had suffered no vital damage, however, and after proceeding under her own steam for a while, was eventually taken in tow by the Nimrod, which, with two destroyer divisions, had been safeguarding the westbound traffic, and was brought safely into Harwich at 6 a.m. next morning, March 13.3 Four days later a severe blow fell on the Dover force.

201. German Destroyer Raid on Dover, March 17-18 1917.—On the night of March 17-18, the German flotillas from Zeebrugge raided Dover Straits once again. The German force under Commander Tillessen consisted of fifteen destroyers in all—the 6th Flotilla (seven destroyers), the 1st Zeebrugge Half Flotilla under Commander Konrad Albrecht (four boats), and the 2nd Zeebrugge Half Flotilla, under Lieutenant-Commander Zander (four boats).4

Commander Tillessen's advance was planned in three sections two against the barrage and one against the northern entrance of the Downs. He himself with the 6th Flotilla⁵ was to reach the Barrage at 11 p.m. and attack its western portion, keeping to the westward

² An increase of seven destroyers. There were 31 destroyers at Dover on December 30, 1916. A THE STATE OF THE

³ M.61443/17. 4 M.02331/17.

¹ H.S. 247/82.

² H.S.A. 271/168; H.S./Q.26.

³ H.S. 247/90. She was torpedoed by U.C.69.

⁴ German Forces in Exchange H.S./Q.16.

⁵ S.49 (Leader); 11th Half Flotilla G.86 and G.87 under Lieut. Cdr. Rümann; 12th Half Flotilla V.43, V.45, G.37 and V.46 under Lieut.-Cdr. Lahs.

of a line joining the Area Buoys Nos. 2 and 9.1 A second zone of operation to the east of the line joining the two buoys² was allotted to Commander Konrad Albrecht, in command of the 1st Zeebrugge Flotilla,³ who was to advance east of Sandettie. The attack on the Downs was entrusted to Lieutenant-Commander Zander with the 2nd Zeebrugge Half Flotilla.⁴ (Plan 26.)

In making these dispositions it was evidently Commander Tillessen's intention to ensure that the Germans should enjoy the full advantage of being able to open fire at once and without challenge on any vessel they might meet. His dispositions miscarried, for two of the flotillas actually operated in the same area, but their readiness to open fire remained with them and was the deciding issue of the raid.

The first to start was the 6th Flotilla, which left Zeebrugge at 6.10 p.m., and passing "Tonne 2501" made for the Straits. Commander Tillessen reached the Barrage at 10.35 p.m., and must have crossed it with his seven boats somewhere near 12 A buoy. He made to the W.S.W. at 15 knots, and had gone about three miles when at 10.47 S.49, the flotilla leader, sighted a darkened destroyer two points on the port bow. This was the *Paragon*.

202. Dover Dispositions, March 1917.—The Dover forces had been considerably increased since the raid in October and their disposition had been changed. On the night of March 17 the forces available consisted of one light cruiser, two flotilla leaders, thirteen destroyers and two monitors, disposed as follows:—

In the Downs off Deal:—

Light cruiser, Canterbury. Flotilla leader, Faulknor.

Destroyers, Saracen; Viking, Mentor and Ambuscade.

Off Ramsgate:—

Monitors, Erebus, Prince Eugene.

Dover (in reserve) :-

Flotilla leader, Broke.

Destroyers, Myngs, Lucifer, Linnet, Lochinvar, Morris.

Patrolling¹ behind the barrage were four destroyers some two miles apart. These were, from west to east, the *Laertes* off 5 A buoy; the *Laforey* (Lieutenant A. E. Durham) off 7 A; and the *Llewellyn* (Lieutenant William A. C. Salmond) off 9 A²; the fourth, the *Paragon* (Lieutenant Richard G. Bowyer) was patrolling off 11 A buoy. (Plans 26, 27.)

203. Attack on "Paragon," March 17, 10.50 p.m.—At 10.50 p.m. the Paragon had just turned to the north-east and was some 31 miles south-west of 11A buoy3 when she sighted three or four destroyers looming through the darkness on the port beam. The signalman started to challenge, but "before half of the challenge had been made" the enemy opened fire with his guns and fired a torpedo. It hit almost amidships in the foremost boiler-room. The ship was doomed, but in the few minutes left to her, Petty Officer Edward John Brook at the foremost tube4 found time to fire a torpedo. He had barely done so when a second torpedo hit the engine-room; meanwhile, two projectiles had hit the racer of the after tube, while the men were trying to train it round; the second torpedo caused a "big combustion" underneath the tube which blew them overboard. The forepart of the ship broke away and sank. Within eight or nine minutes the Paragon had disappeared. Some ten men got on to a raft but as the after part of the ship sank the depth charge exploded and blew them off. Only ten were saved.5 The first torpedo had been fired by S.49 at 300 metres and two others by G.86 at 250 metres. Of these, two and possibly three, hit.6

204. German 6th Flotilla.—The attack had barely started when a portion of Commander Tillessen's force lost touch with him. When fire was opened Lieut.-Commander Lahs in the 12th Half Flotilla in rear thought he saw the head of the line turning to starboard. He therefore led his own half flotilla round and lost touch

^{1&}quot; Innerhalb der Kanalsperre, die linie Tonne 9—Tonne 2 nach osten moglichst night uberschreiten." "Within the Channel Barrage the line Buoy 9—Buoy 2 as far as possible not to cross to the Eastward." (Tillessen's Orders, March 1917.) Tonne (Buoy) 9 and Tonne 2 seem to have been the old Area Buoys in 51° 7½' N., 1° 37' E and 51° 0½' N., 1° 35½' E.
² i.e., the eastern portion of the Barrage.

³ V.47 (Leader) 1st Half Flotilla (Lieut.-Cdr. Waitz), V.67 (Leader), V.68, G.95, G.96.

⁴ S.15 (Leader), S.18, S.20 and S.24.

⁵ Buoy 2501 (German designation) in Lat. 51° 21' N., 2° 7' E.

⁶ Lat. 51° 8' N. Long 1° 50' E.

¹ On north-east and south-west beats.

² These three L destroyers had been transferred from Harwich only ten

³ This position (Lat. 51° 6′ N., Long. 1° 46′ E.) is from a consideration of the British and German reports and Court of Enquiry (M.03552/17), Lieutenant A. E. Durham (*Laforey*) made it approximately 51° 6¾′ N., Long. 1° 46′ E.; the Chief of the Staff (Admiral Oliver) made it approximately Lat. 51° 6½′ N., Long. 1° 47′ E., and thought that the position given in V.A. Dover's report (Lat. 51° 8′ N., Long. 1° 48′ E.) was not borne out by the evidence (M.03552/17).

⁴ Trained to port; the after tube was trained to starboard. The torpedo ran and was picked up, apparently without its head (Admiral Bacon's report, March 23, 1917).

⁵ Laforey picked up two survivors about 11 p.m. and Motor Launch 241 eight at 3.15 a.m.

⁶ German report says "three heavy explosions clearly seen." Lieutenant Frank M. Abbott, first lieutenant of *Llewellyn*, also saw three large explosions. (Enquiry, Q.49).

with the head of the line. Evidently realising the danger of trying to recover contact he made for home and passed the barrage at 11 p.m. Commander Tillessen and the 11th Half Flotilla held on the south-west for a mile or so then turning round came up on a course east-north-east at 12 knots towards the late scene of action, and at 10.57 p.m. passed the wreck of the *Paragon*, 50 metres on his starboard beam. He must have just missed the *Laforey* which arrived on the spot a few minutes later.

205. The "Llewellyn" Torpedoed 11.15 p.m.—The Laforey had been patrolling some three miles to the westward of the Paragon and at 10.50 p.m. was three miles south-west of No. 7 A buoy steaming north-east at 10 knots towards it. She saw the explosion and proceeding at full speed reached the spot at 10.59 p.m., and switching on her searchlights began to pick up survivors and told the Llewellyn to "hurry up." (Signal 11 p.m.) She thought the Paragon had struck a mine.1 The Llewellyn had been patrolling only a mile and a half to westward of the Paragon, and at 10.45 was about three miles south-west of No. 9 A buoy steaming north-east at 12 knots. She saw a heavy explosion, but held on apparently for a mile or so towards the barrage, then made to the southward towards the firing. At 11 p.m. she sighted a searchlight on the port bow. This was the Laforey who sent a signal to her at 11.15 p.m. to "come quick." The Llewellyn seems to have arrived on the spot about 11.15 p.m. She stopped, switched on her searchlight and made preparations to pick up survivors. The burning of searchlights was her undoing. Tillessen at 11.10 p.m. was only a mile or so from the spot on his way home. He saw the searchlight burning astern and turned for another attack. Within a few minutes he had come on the two destroyers2 without disclosing his presence. As he passed, S.49 and G.87 let go two torpedoes, and one running at high speed on the surface just missed the stern of the Laforey and struck the Llewellyn. The Germans held their guns silent and passed swiftly and silently by without being seen, leaving both the Laforey and Llewellyn totally unaware that they had been attacked by destroyers. At 11.30 p.m. the Laforey reported to the Vice-Admiral at Dover and to the Laertes that the Paragon and Llewellyn had been torpedoed two miles south-west No. 11 A buoy, adding five minutes later, the words "by enemy submarines." The Laertes (Commander Francis A. Clutterbuck) having intercepted at 11.19 p.m. a signal—"Am torpedoed "-from the Llewellyn to the Laforey was hurrying down from her patrol off 5 A buoy. When she arrived off 11 A buoy she turned south-west and about two miles from it3 came on a quantity

1 Laforey, Lieut. A. E. Durham's report, March 18, 1917.

of oil and survivors on rafts calling for help. Commander Clutterbuck was turning at 11.45 p.m. to slip his whaler when he heard two loud reports to the west-north-west and went off at full speed in that direction as he thought to engage the enemy. The reports, however, were nothing more than the *Llewllyn* discharging her guns. The *Laertes* came up with her at midnight. She was afloat and steaming stern first with one engine at about five knots, was escorted by the *Laertes* towards Dover, 12 miles away.

The Laforey when she had seen the torpedo hit the Llewellyn at 11.15 p.m., proceeded east-north-east to attack the submarine that she imagined had fired it. She saw nothing of the German destroyers and continued to patrol in the vicinity of the Barrage at high speed during the night.

206. German Flotillas Retire.—Commander Tillessen, after torpedoing the Llewellyn, held on a south-west course for a minute or two. His endeavours to keep his two forces entirely separate had fallen through. In the very act of attacking the Llewellyn he suddenly sighted the 1st Zeebrugge Half Flotilla bearing down on him. Lieut.-Commander Albrecht with his five boats of that Half Flotilla had crossed the Barrage at 10.50 p.m. evidently somewhere between 12 A and 13 A buoys. The 6th Flotilla had crossed it 20 minutes before, less than a mile to the westward, and was evidently operating in the same area. Albrecht saw the Laforey's and Llewellyn's searchlights and pushed forward to attack them; but sighting the 6th Flotilla making for the same objective, grasped the situation and at once gave up the attack. The rapid recognition of one another apparently without any challenge visible to the British, says much for the German system (whatever it may have been) of recognition at night.

Commander Tillessen after torpedoing the *Llewellyn*, joined up with Lieut.-Commander Albrecht and in order to clear up the "extremely obscure position," pushed to the north-west for some minutes and sighting nothing turned home, passed the Barrage at 11.30 p.m. and reached Zeebrugge at 4.30 a.m.

207. Action taken at Dover.³—The machinery at Dover was already in motion. At 11.2 p.m. the *Llewellyn's* signal reporting heavy firing off Calais had been received, followed at 11.10 p.m. by the *Laforey's* signal to say she was picking up survivors—she said nothing of the explosion and did not mention what ship had been sunk—and Admiral Bacon, at 11.20 p.m., ordered all the six reserve

² Laforey was heading about E.S.E.; to pedo seemed to come from E.N.E., Llewellyn was on Laforey's starboard quarter. (Lieut. A. E. Durham.) ³ 51° 6³/₂ N., 1° 47′ E.

¹ Laertes says about 8 knots. It must have been nearer four. A tug met them at 2.20 a.m. and Llewellyn reached Dover at 4 a.m.

² "Um äusserst unklare Lage zu klären" (Tillessen's report). H.S./Q.11.
³ M.03552, Vice Admiral, Dover, March 23, 1917 and Dover Papers in H.S.A. 308/445. The times given are from Dover Signal Log in H.S.A. 308/505.

boats in Dover to slip. At 11.48 p.m., however, when the Laforev's signal of 11.35 came in to say that the Paragon and Llewellyn had been torpedoed by a submarine, he countermanded his order and at once ordered the two P boats¹ to go out and hunt for it between 11 A buoy and the French coast. At 11.55 p.m. he instructed the Laertes and Laforey to fall back five miles to the westward of the usual patrol line and patrol at good speed. At 12.5 a.m. the Llewellyn reported that she was returning, stern first, to Dover and shortly afterwards Admiral Bacon was informed that only two survivors had been picked up from the Paragon. At 12.34 a.m., therefore, he ordered out six motor launches to look for further survivors, and sent a tug to assist the Llewellyn. A quarter of an hour passed, when at 12.45 a.m., T.B.4 reported that enemy destroyers were bombarding Margate. This did not materially affect the situation off No. 11A buoy, but at 1.7 p.m. there came a signal from the Laforey to say that the Paragon's survivors had stated that they had seen enemy destroyers. This report put an entirely different complexion upon the whole affair. The P boats then on their way to the barrage, were no match for destroyers and were immediately recalled. P.11 was ordered to relieve the Laertes, in escorting the Llewellyn, and the Myngs and Lark were despatched to reinforce the Laforey five miles west of the barrage patrol line, but nothing further was seen.

208. The Attack on the Downs, March 17–18.—The report from T.B.4 that enemy destroyers were bombarding Margate at 12.45 a.m. was well founded. Lieutenant-Commander Zander, to whom had been entrusted the attack on the Downs, arrived within sight of the British Coastal lights near the North Foreland about 11.0 p.m. His orders were to turn back at one o'clock.

Five armed drifters² were on the lookout that night between Broadstairs Knoll and North Sand Head. The *Paramount* was to the eastward; the night was dark but fine and clear and calm; the tide was ebbing. At 12.30 a.m. the *Paramount* (Lieutenant G. E. Johnson, R.N.R.) suddenly sighted three destroyers coming from the north-east and at once fired her green rocket, the signal for "enemy in sight." They passed her close astern and opened a heavy fire. But she had doused every light and escaped unhurt.³

Under normal circumstances no merchantmen were allowed to anchor north of the Gull, but three days before (March 15) a small British steamer, the *Greypoint*, of Hull, on her way from the Downs to the Thames in ballast had broken down and anchored off Broadstairs.⁴ Zander circled round and sent a torpedo into her

which broke her in two.¹ After attacking the drifters again he sent some shells into Ramsgate² and Broadstairs. The damage done ashore was slight; three houses were hit but there were no casualties.

The only serious damage was to the armed drifter *Redwald*. She received five hits, and two boxes of 3-pdr. ammunition blew up, wounding the skipper and a trimmer seriously and six other ratings slightly. She was beached and subsequently brought into harbour. The only British warship to sight the enemy was *T.B.4*. She was patrolling behind the drifter line near the Gull Light Vessel when the firing opened and at once made for it at full speed. At 12.45 a.m. her captain, sighting the enemy some two miles ahead firing towards the land, reported to the Vice-Admiral at Dover that three enemy destroyers were bombarding Margate, and added, five minutes later, that they were steering east. He endeavoured to keep touch but was soon outdistanced. Shortly before 1 a.m. the firing ceased and within ten minutes the enemy disappeared in the direction of the Elbow Buoy.

In the meanwhile the Faulknor and her division, lying off Deal, had proceeded northward, followed by the Canterbury at 12.42 a.m. On hearing, a few minutes later, from T.B.4 that the enemy was steering east, the destroyers passing close to the North Goodwin made for the Elbow Buoy, in the hope of cutting him off. They were too late, and at 1.30 a.m., having seen nothing, they returned to the Downs.

In his report on the incidents of the night Admiral Bacon pointed out that in attacking the barrage the enemy had only to keep "a rigid lookout" for one hour and fire a torpedo at anything seen and run away, while the British boats had night after night to keep a lookout the whole night through. The enemy could decide whether he should "shoot and scoot" or carry out a more or less prolonged attack. They could attack at any point: he had to guard the whole breadth of the Straits. As regards the raid on the coast, the attacks against the shore were comparatively harmless; his main preoccupation was to cover and protect the shipping in the Downs. The problem was a difficult one, for in this "shoot and scoot" warfare everything was on the enemy's side, but he was very sure that they might yet be given a lesson.4

The Admiralty replied to say that his difficulties were fully realised, but that it was considered necessary to take some risks for the sake of greater concentration of force on the barrage. They concurred in his disapproval of the use of searchlights by vessels attempting to rescue survivors.

¹ P.11 and P.21.

² From east to west, Paramount, R.R.S., Present Help, Redwald, Feasible, Joe Chamberlain.

³ H.S.A. 308/529.

^{4 1}½ miles S.E. of Broadstairs Buoy.

¹ S.15 fired one (circled) and S.20 another which hit.

² Five at Ramsgate (12.40 a.m.), four at St. Peters, four at Broadstairs.

³ H.S.A. 308/530

⁴ M.03552/1917, Dover, March 23, 1917.

There was one point which came to the fore in the consideration of the case—namely, the practice of challenging. On October 26, 1916, the *Lawford* challenged¹ and was answered with torpedoes, one of which hit the *Nubian*. The *Paragon's* challenge had been answered with torpedoes which had sent her to the bottom.

The Court of Enquiry held on her reported that her loss "would appear to be due to her having encountered, unsupported, superior enemy forces and revealing her position to them by challenging.² It is difficult to avoid the conclusion that similar occurrences will recur when vessels are isolated at night and resort to challenging." Though exception was taken to the statement, it may be said that this was an important factor in the doings of the night, and it is noteworthy that both on October 26 1916, and on March 17 1917, the first rocket signal announcing enemy forces was fired by vessels of the Auxiliary Patrol.³

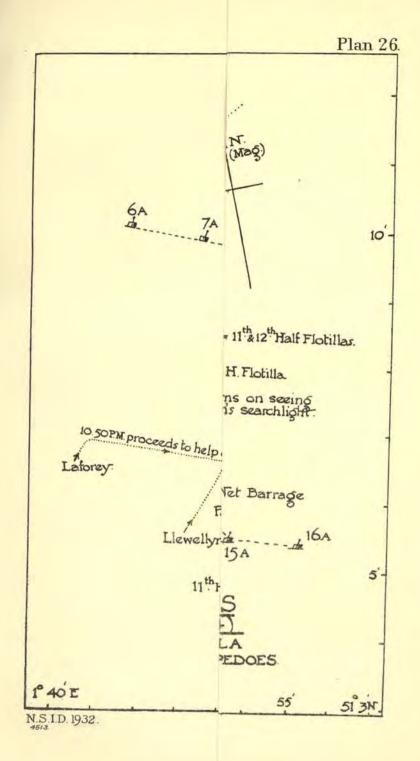
A discussion of the whole question between the First Sea Lord and Vice-Admiral Bacon at the Admiralty led to a revision of the orders at Dover. The new orders were dated March 25, 1917.4

The barrage patrol was divided into two parts, an eastern and a western. The east patrol ran from "about 1½ miles S.W. of No. 7A light buoy to near No. 5 buoy; sighting No. 6 Calais buoy as necessary"; the west patrol ran from the South Goodwin Light to 1½ miles S.W. of No. 5A light buoy. The patrol was to run more nearly parallel to the barrage, and one could be certain that, except to the south and east of No. 5 buoy and within two miles of the Goodwin Lightship, everything sighted was an enemy. Challenging was no longer necessary. Destroyers were not to hesitate to use torpedoes at once on sighting any vessels without challenging.

The Vice-Admiral had stated his belief that one serious blow would without doubt make the enemy less eager to execute these raids. Four weeks later his hopes were to be splendidly fulfilled.

209. German Raid off Lowestoft, March 29.—Meanwhile the Germans contented themselves with another small raid on the East Coast. Eleven days after the attacks on the Dover barrage, German destroyers appeared off Lowestoft, just as they did off Aldeburgh in the previous November, and sank the small steamer

on March 17, 1917.



H.W. VII, page 188.
 Report, Capt. H. C. J. Grant and Commander F. H. L. Lewin, March 3, 1917, M.03552/17. See Vice-Admiral's Dover comments V.A. Dover to Captain Grant and Commander Lewin, March 22, 1917.
 The vacht Ombra on October 26, 1916 and armed drifter Paramount

⁴ C/98 of March 25, 1917, in H.S.A. 303/408 (Secret Orders for Dover Patrol). There were some provisional orders issued on March 20, see H.S.A. 303/406.

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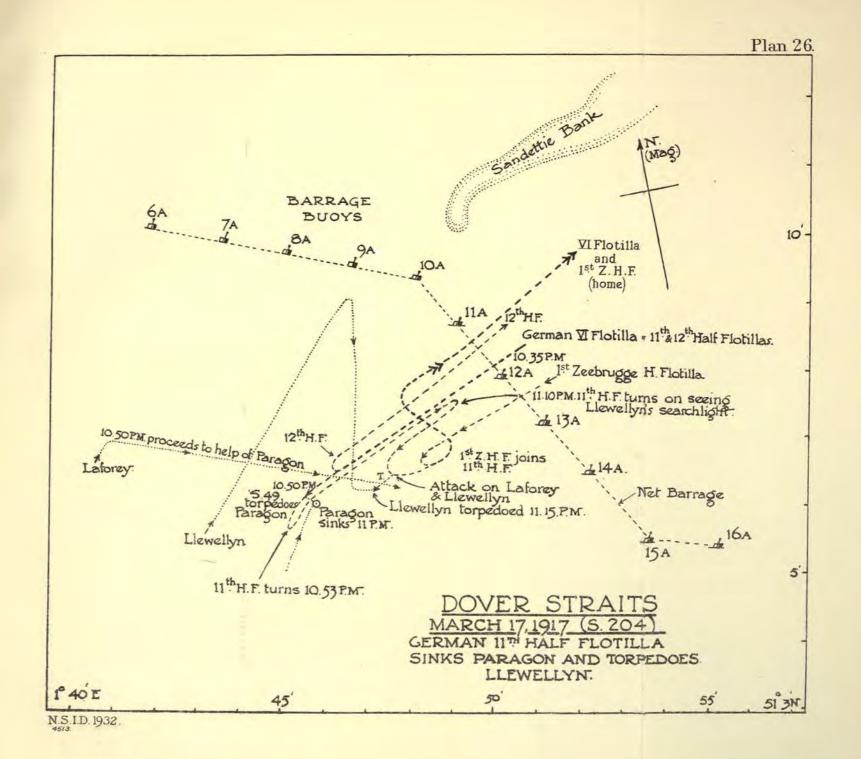
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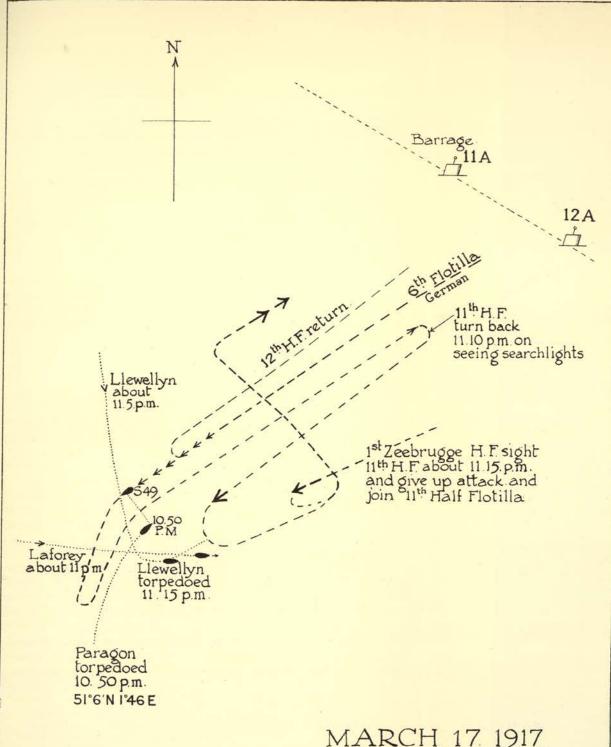
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⁶ November 26, 1916, H.W. VII, page 220.



MARCH 17. 1917 DOVER

Paragon Torpedoed 10-50 P.M. Llewellyn Torpedoed 11-15 P.M S. 205

Mascota, The night was dark, and the Mascota, which had left Treport for the Tyne at noon on March 27, and had been sighted by the steamer Gower Coast in the Downs the next day, was passing some eight miles off Lowestoft in the early hours of the 29th, when, at 12.40 a.m., she was suddenly attacked and sunk. Seven of her crew were captured and taken to Germany. The monitor Havelock at Lowestoft observed the beams of two searchlights and heard the reports of guns to the south-east of the pier. The beams were trained on a merchant ship which was seen to burst into flames and which must have been the Mascota. For a moment, too, they lit up a destroyer which was recognised as one of the big German "G" class. Although some of the enemy shells ricochetted into the town of Lowestoft, the Havelock withheld her fire as it was clear that the town itself was not being bombarded, and the chances of hitting the searchlights were remote. The next day fragments of the enemy's shells were picked up ashore, but beyond the loss of the Mascota no damage was suffered.2

209A. A Belgian Coast Bombardment Postponed.—On March 5 Admiral Bacon had framed detailed orders for a bombardment of Zeebrugge which he intended to carry out on Sunday, March 25.3 On the 13th Commodore Tyrwhitt was ordered to detail eight destroyers and a leader to assist the Vice-Admiral, Dover, in an operation which would shortly take place, and was informed that since they were for use in the event of interference in the operation by German destroyers, they should be held in reserve. The Vice-Admiral was to arrange with the Commodore for the transfer of this force, and the remainder of the Harwich Force was to be at short notice during the operation.4 On March 14 and 15, Admiral Bacon informed the Admiralty that the operations were postponed for 24 hours, and on the 16th that they had again been deferred. It is not clear to what operations he was referring, but they could scarcely have included the proposed bombardment of Zeebrugge,5 which was not due to take place until March 25. On the morning of March 24, however, it became known from intercepts that a German flotilla had proceeded to the Belgian ports during the night⁶ and in order to support Dover more effectively Commodore Tyrwhitt moved his force, by Admiralty order, to the Thames Estuary.7

Next day the proposed attack on Zeebrugge was postponed, ostensibly on account of mist,8 but it seems more than possible that the presence of the German flotilla on the Belgian coast may have had some bearing on the matter.

¹ 674 tons.

² M.03985/17; M.65048/17; The Times March 31, 1917, page 6.

³ H.S.A. 315/7 (Dover Pack, Vol. XX).

⁴ H.S. 388/990

⁵ H.S. 389/231, 530, 893.

⁶ H.S. 645/193.

⁷ H.S. 645/196 and H.S. 247/97.

⁸ Dover Monograph, O.U. 5413(D), page 43.

Admiral Bacon was intent on wresting these ports from Germany at the earliest possible moment. In 1915 he had prepared a plan for an attack on Ostend,¹ but the erection of Knocke Battery had rendered it abortive. Early in 1917 he was investigating methods of assisting the army with naval forces in its advance on Belgium. He was in favour of a land offensive along the coast in conjunction with a landing—"not a mere raid, but an important movement."¹ This project, however, required an exhaustive consideration of the whole problem in order to discover the most suitable place and the best method of execution.

CHAPTER XI.

MARCH 1917. (Plans 30, 31.)

HIGH SEA FLEET, SUBMARINES.

210. "U.49." February 17-March 14.—U.49 left the Ems on February 15. She had to return with defects but was off the Shetlands by February 19 when, at 7.30 a.m., she sank the Russian S.S. Sigrid, 1,272 tons in 60° 25' N., 0° W. By February 26 she was off the South West of Ireland where, at 11.30 p.m., in 52° 13' N., 11° 26' W., some 30 miles from Tearaght Light, she sent a torpedo into the British S.S. Tritonia, 4,444 tons, bringing horses from St. Johns N.B. to Liverpool. The Tritonia had a gun but saw nothing of the submarine before the torpedo struck her, when she sent out a S.O.S. call. The sloop Bluebell came up and took her in tow, and she was still afloat at 9.20 a.m. (February 27), but sank before she reached shore. U.49 went on and, at 11.30 a.m. (February 27), 80 miles to the westward, in 51° 36' N., 12° 47' W., sank by bombs the Italian S.S. Liugino B, 1,971 tons, on her way to the Tyne. Then she moved south-east and, at 4.45 p.m., sank the S.V. Galgorm Castle, of 1,596 tons. Some seven sloops were working at this time in the Fastnets area as far west as 14° but U.49 was apparently only sighted once, by the Camellia, on February 27, in 52° N., 14' W., and then only her conning tower was seen, 2 though on February 28th, the Ruby, escorting H.M.S. Calgarian outward bound, mistook a derelict for a submarine and rammed it, seriously damaging herself.3

Three days passed while U.49 cruised about in the area. On March 2nd at 2 p.m., in 52° N., 11° 44' W., she fired a torpedo at the British S.S. Trojan, which missed. It was March 3 before she got another ship, the British S.S. Newstead, 2,856 tons, on her way from Barry to Naples with coal. She was torpedoed without warning at 9.50 a.m., in 52° 2' N., 13° 24' W., before her 12-pdr. gun had time to fire. A heavy sea was running, land was 105 miles off, and several survivors died in the boats before they were picked up. U.49 left her, and that afternoon at 3.30 p.m. some 26 miles to the south-west in 51° 50' N., 14° W., 1 sent a torpedo into the British S.S. Sagamore, 5,197 tons, on the way from Boston to Liverpool. She sank in half an hour and only one of her boats with seven men still alive, was picked up; fifty-two of her crew were lost. The S.S. Argyll was then in sight to the south-east, and U.49 proceeded to chase her (March 3) and opened fire but the Argyll returned the fire with a 12-pdr. (Japanese) and with the help of a clever smoke screen,2 got away as darkness fell. This was the end of U.49's cruise.

She was back by March 14, having sunk six ships (five S.S. and one S.V.), of 17,336 tons.

211. "U.70," February 23-March 20.—While U.49 was working to the westward U.70 at the beginning of the month was off the Shannon for a time. She had sailed on February 23 intending to proceed by Dover, but decided on account of fog to go north about. By March 3 she had reached the south-west coast of Ireland off Tralee Bay in 52° 22′ N., 10° 26′ W., where at 5.30 p.m. she torpedoed the British S.S. Kincardine, 4,107 tons, Cardiff to Genoa, which had left Cardiff on February 28 when the South Coast of Ireland route (route 15) was still open, though it had been closed on March 1.3

The ship had no wireless and though she was equipped with a 12-pdr. gun it did not fire. Q.27 (H.M.S. Warner) whose masts could be seen on the horizon, hurried up and manœuvring with extraordinary skill, forced U.70 down. Q.27's appearance evidently had its effect, for U.70 then made for the Bristol Channel and there on March 9 off the Smalls in 51° 36′ N., 5° 42′ W., met the British S.V. Inverlogie, a four-masted barque of 2,147 tons, going from Barry to Archangel. It was blowing hard with squalls of snow and a heavy sea when she was torpedoed at 9.45 a.m. One boat was picked up by a schooner, the other by a French ship. The route from the Bristol Channel to the South of Ireland had been closed since March 1, and U.70 sighting nothing, proceeded down towards the Scillies; there she saw, far off, the S.S. Eddystone

^{1 &}quot;The Dover Patrol," Vol. 1/223.

² H.S. 650/66. ³ H.S. 650/61.

¹ This is the position given by S.S. Argyll which saw the attack. A position 50° 30′ N. was given by a survivor in hospital, Capetown.

 ² C.B. 01370, page 23. U.49's report.
 ³ Admiralty Telegram, February 25, 1917, 1346, and Admiralty Telegram,
 March 1, 1917, 0005.

⁴ U.70's report, C.B. 01370, page 30.

engaging U.62 on March 11 (7 a.m.), and was about to rise and join in when a Parseval airship came on the scene and kept her down.1 She went off to the westward instead, and on March 12 met the Russian S.V. Pera, a full rigged ship of 1,647 tons, going from Rosario to Swansea. It was just getting dark at 5 p.m., on a fine calm evening, when U.70 opened fire; the ship had been abandoned and was apparently sinking when the British oiler Winnebago, 4,666 tons, hove in sight, going south; U.70 went off in chase, and at 6.35 p.m. on March 12, managed to fire a torpedo at her which missed (50° 59' N., 7° 14' W.), but she held hard to her chase and at 9.45 p.m., off the Bishops, got a torpedo into her in 50° 11' N., 6° 23' W. Helpless and abandoned, the Winnebago was struck by another torpedo at 11 p.m., but she had sent out a timely wireless, and the Hardy, coming up from Plymouth, drove U.70 down and stood by the ship; the crew returned to her and she was finally brought safely into Plymouth Sound by the Narwhal on March 14,2 a commendable piece of work on the part of all concerned.

U.70 went off to the north-west and at dawn at 6.30 a.m., March 13, in 50° 47′ N., 6° 58′ W., met a small British schooner, the *Elizabeth Eleanor*, 168 tons, from Malaga to Bristol, with iron ore, lying there becalmed. U.70 sank her with half a dozen shots, and going on to the South Coast of Ireland at 3.30 p.m., in 51° 45′ N., 7° 25′ W., met the Russian schooner *Alma*, of 334 tons, from Portugal to Liverpool, with beans, and sent her to the bottom.

She seems then to have gone west and at 4.30 a.m., March 14, fired a torpedo at the British S.S. Ranella, 5,583 tons, which missed.³

The South Coast of Ireland route was closed to outward bound ships at this time and it was possibly on this account that U.70 took a long stretch to the south-west. It was probably she that on March 15 sank the French S.S. Balaguier, 2,293 tons, and Circe, 4,133 tons. They had sailed from Barry with coal. The Balaguier was torpedoed at 6.29 p.m. in 49° 1′ N., 9° 11′ W. The Circe, after a chase was torpedoed in her turn at 9.30 p.m., and abandoned by her crew, though she was still afloat on March 16 when she was seen and boarded by the S.S. Gordonia, which saved the chief engineer and the ship's cat.⁴

U.70 moved westward, and on March 16th, on a bright, clear sunny day, met the American S.S. Vigilancia, 4,151 tons, from New York to Havre with a general cargo. It was 10 a.m. when she let go two torpedoes at her in 48° 57′ N., 9° 34′ W. One struck, the other missed. The wireless was put out of action and fifteen men were drowned by the capsizing of a boat. The information,

which did not reach the Admiralty till March 18, at 5.3 p.m., when the Captain and 28 survivors were landed at the Scilly Islands, led to the closing of the Scillies route half an hour later.

Meanwhile, U.70 lurked about on the same spot and at 1.45 p.m. (March 16) sighted the British S.S. Norma Pratt, 2,387 tons, from Havre to New York, going 10½ knots on a westerly course. The ship had no wireless and no gun and no patrol vessel was in sight. She was stopped in 48° 53′ N., 9° 53′ W., and sunk by a torpedo. U.70 reported her position that day at 8.30 p.m., 48° 57′ N., 9° 30′ W., and again on March 17, 8.5 p.m., in 49° 50′ N., 8° 42′ W., adding that she was returning by the Channel.¹

U.70 then steered for the Scillies, and on March 18 at 6.30 a.m. in 49° 37′ N., 6° 37′ W., met and torpedoed the British S.S. Joshua Nicholson, 1,196 tons, from London to Alexandria. She had no wireless and no patrols were in sight. The 12-pdr. gun did not fire because it had nothing to fire at. The port life boat capsized and while the starboard one was being got out the ship sank suddenly and the crew of 29 were all lost, except three men, picked up from the wreckage by S.S. Venetian.

This was the last attack in U.70's cruise. She passed Dover on the night of March 20 and reported having sunk seven steamers and six sailing ships of 33,000 tons. She seems to have sunk six steamers and four sailing ships of 23,229 tons.

212. "U.44." February 24-March 24.—U.44 sailed the day after U.70 and made for an area well to the westward, where she worked somewhere between 50° N. to 52° N. and 14° 30' W. to 18° 30' W. She went north about, and it was probably she that on March 2 at 2.50 p.m. in 55° 20' N., 8° 40' W., off Tory Island (Ireland, N.W.) was fired at by the A.T. Vale of Lennox2 from Buncrana (Lough Swilly) base. She was some 150 miles west of the Fastnets on March 6, and in three days was able to sink four ships. The first was the British S.S. Caldergrove, 2,809 tons, from Bermuda to Queenstown, which was torpedoed at 8.5 a.m., March 6, in 51° 30' N., 14° 51' W. She had no wireless, and the 12-pdr. gun which she carried did not fire; of the thirty-five crew, nineteen were drowned and H.M.S. Lavender picked up the rest. U.44 proceeded east, and at 12.55 p.m., in 51° 42' N., 16° 11' W., torpedoed the British S.S. Fenay Lodge, 3,223 tons, an empty transport going from Newport News to Cherbourg. She had no guns nor wireless and no patrols were in sight. The ship remained afloat some hours, while $\hat{U}.44$ went off to the north, and on March 7 met the French S.S. Ohio, of 9,620 tons on her way from New York to Havre; she was lying stopped picking up the boats of the Fenay Lodge, when at 12.20 p.m. U.44 sent a torpedo into her. She had a gun of old pattern which did

¹ C.B.01370, page 30.

² H.S.388/1131.

³ S.O.S. via Fishguard, no details.

⁴ Études et Mouvements, March 1917, page 21. Passed abandoned ship 49° 18' N., 8° 47' W.

¹ There is no record of this information having been passed to Commands.

² H.S. 533/190.

not get a chance to fire; she had wireless, too, and sent out an S.O.S. but she was sinking rapidly and no patrols were at hand. The S.S. Winnebago passed about 5 p.m., but the boats warned her not to stop, and were not picked up till the next day, when H.M.S. Lavender hove in sight.

U.44 turned south again and the next day, March 8, at 0925 in 51°22′N., 14°31′W., met the British S.S. Dunbar Moor, 3,651 tons, from Dakar to Manchester, going 8 knots in a choppy sea, and sank her by gunfire. She had a 13-pdr. which did not fire, wireless which sent no message, and no patrols were in sight. The crew were in boats till March 12, and the master died from exposure. At 1.30 p.m. (March 8) in about 51°16′N., 14°23′W., a small Norwegian S.V. Silas, 150 tons, in ballast from Bordeaux to Damstadt, passed and she, too, was sunk.¹

U.44 went on to the westward, and on March 10 in 51° 19' N., 16° 3' W., at 12.54 p.m., met the British S.S. Arataca, 4,094 tons, on her way from Limon to Liverpool. The submarine was sighted on the surface due west and the ship, which was going N. 47 E. (true), turned to bring her astern. The submarine opened fire at about 6,000 yards, and the ship returned the fire with a 13-pdr. Japanese gun and sent out an S.O.S., which was answered. Though the Arataca was hit thrice and had one man killed and three others injured, she held pluckily on till 3.30 p.m., when the destroyer Parthian came up, drove the submarine down and saved her.2 Vice-Admiral Bayly in his report made some severe comments on a wireless message about a lading of bananas sent by the Arataca that morning at 3.45 a.m., which probably helped to locate her. U.44 remained in the vicinity and the next day (March 11) at 12.32 p.m. in 50° 59' N., 15° 53' W., met the British S.S. Spectator, 3,806 tons, on her way from Dakar to Liverpool. The ship sighted the submarine astern and kept it there. The submarine opened fire at 4,000 yards, and the ship, which was armed with a 4.7-in. gun, gave her 17 rounds in reply, till the submarine gave up the chase and was seen by optimistic eyes in the Spectator to go down "with her bows high in the air and enveloped in smoke." These two cases probably did much to confirm the view that a submarine could not capture by gunfire alone an armed ship that was ready to show fight. It was possibly U.44 that the British S.S. Port Chalmers, 6,543 tons, from New Zealand to London, saw in the moonlight at 3.48 a.m. on March 12 in 49° 48' N., 15° 13' W. The Port Chalmers had a 4.7-in. gun and fired a round at her, 2,000 yards, which sent her down.

Two days passed before on March 14 at 7 a.m., in 52° 4′ N., 18° 31′ W., U.44 met the British S.S. Bray Head, 3,077 tons, St. Johns

to Belfast, with 1,000 tons of howitzer shells on board. It was fine, with a moderate swell, when the submarine was seen 13 miles off on the starboard bow and the ship turned to bring it astern. It opened fire and hit the ship at the eleventh shot. The ship returned a feeble fire with a 3-pdr. which could not range. A wireless message was sent out, but it was far too far west for any patrols to be about, and the ship was sunk by gunfire at 8 a.m. The boats were 300 miles from land; one with the chief mate and eighteen men, of whom two died, was picked up by H.M.S. Adventure on March 18 eighty miles from land; the captain (Captain J. C. Hoy) and eighteen men in another boat were never heard of again. U.44 then proceeded to the south-east, and on March 16 at 2.23 a.m., in 50° 12' N., 17° 34' W., met the British S.S. Narrangansett, 9,196 tons, from Plymouth to New York. The Narrangansett had a gun and sent out an S.O.S. at 2.23 a.m. This was the last heard of her; none of her boats reached land. She was numbered among the "Spurlos Versenkt" of unrestricted warfare-U.44's last ship on that cruise. She returned north about and was back on March 24 with the report that she had sunk 30,000 tons. She had actually sunk six steamships and one sailing vessel of 31,726 tons, and had not sustained a single serious counter-attack.

213. "U.66," February 24-March 3.—U.66 left on February 24 with instructions to operate off the Shetlands, which she reported herself unable to do on account of the strength of the patrols. On March 1, in 60° 3' N., 1° 10' E., she sighted the British S.S. Birchgrove, 2,821 tons, on the way to Grimsby and gave chase at 9.35 a.m. The Birchgrove opened fire with a 12-pdr. gun and made off. U.66 followed hard and on her way, at 11 a.m., sent a torpedo into the Norwegian S.S. Gurre, 2,866 tons, from Bergen to Hull. The ship broke in two and sank at once and out of the crew of twenty, seventeen and two English women passengers were drowned. At 11.30 a.m. another Norwegian S.S., the Livingstone, 1,005 tons, from Bergen to Lerwick, with ammonium nitrates, hove in sight and U.66 abandoning the chase of the Birchgrove, captured the Livingstone; her engines began to give trouble, forcing her to return with the Livingstone to Cuxhaven, which she reached on March 3, and where she reported that the route, Kirkwall to Bergen, promised no success.

214. "U.C.43" sunk by "G.13," March 10.—U.C.43 left Heligoland on February 25, and as she never got back little is known of her cruise. She was on the south coast of Ireland by March 1, and at 2 p.m., in 51° 11' N., 8° 28' W., met the Norwegian S.V. Mabella, 1,637 tons, going from Texas to Denmark with oil cake. U.C.43 was on the surface and opened fire at 2.15 p.m. and sank her by gunfire and bombs. The crew of twenty pulled for the shore and were picked up about 6 p.m.

¹ Position given in M.63331 is 53° N. 16° W. This is plainly wrong for the incident was seen by the boats of the *Dunbar Moor*.
² M.63235/17, H.S. 650/74.

At 6.30 p.m. she got another victim, the Norwegian S.V. Storenes, 1,870 tons, from Buenos Aires to Queenstown. The submarine came up in the dusk 1,000 yards off on the starboard beam. As a man-of-war had been in sight to the eastward she fired a torpedo which missed the stern by 20 feet, then sank the ship by bombs. All the crew of twenty got into the boat and were picked up safely three hours later by a British man-of-war. Nothing is known of her up to March 6, but in the interval she probably laid her mines as follows:—1

Old Head of Kinsale .. 6 (4 found on 11th—12/3).

Seven Heads .. 6 (3 found on 13th—14/3).

Cape Clear and Fastnet .. 6 (Norwegian S.S. Malmanger mined 22/3; 5 found on 24th—25/3).

On March 6, at 9 a.m., in 51° 47′ N., 10° 43′ W., it was probably she that met the British S.S. Cornelia, 903 tons, Oporto to Cardiff, which the Poppy had rescued that morning from an attack by U.53. The ship was proceeding E. by S. at $7\frac{1}{2}$ knots, when, at 9 a.m., a submarine appeared astern on the surface; there was no patrol in sight and the Cornelia was sunk by gunfire, in 51° 47′ N., 10° 43′ W., off the Skelligs. All the crew of sixteen were saved. At 2 p.m. that day, in 52° 9′ N., 10° 35′ W., five miles from Tearaght, it may have been U.C.43 that attacked the A.T. Ben Earn. Her fire was returned with a 6-pdr. and the submarine went down. It was 11 p.m. (March 6) when the Japanese S.S. Sawa Maru, 2,532 tons, Huelva to Newport (Mon.), came along in 51° 55′ N., 11° 33′ W.²

She was going N. 70 E. 8 knots when a submarine on the port quarter opened fire. No patrols were in sight; the ship had no wireless and no gun; she stopped; was abandoned and was finally sunk by gunfire.³ The crew of forty-eight all got away in the three boats; the wind was east and the chief officer's boat with sixteen men was picked up by the S.S. Winnebago at 7 a.m. on March 8; the master's boat with twenty was picked up by the Mignonette at 1.50 p.m.; nothing more was heard of the third.

It took *U.C.*43 four days to reach the Shetlands, where her cruise was to come to a sudden end. On March 10, at 3.55 p.m., she was some 10 miles N.W. of Muckle Flugga, where a submarine patrol was working, when she was sighted by *G.*13, who let go two torpedoes at her at 4.49 p.m. One got home with a great explosion at 4.52 p.m., and *U.C.*43 disappeared with all hands. She had sunk

two steamships and two sailing vessels of 6,942 tons and her mines off Cape Clear were to sink the Norwegian S.S. *Malmanger*, 5,672 tons, on March 22.¹ Her captain was Kaptlt. Erwin Sebelin (See S. 251.)

215. "U.58," February 26-March 14.—U.58 had an uneventful cruise. She left on February 26 to work off the north-west of Scotland, going round Muckle Flugga (north point of Shetlands). There, 20 miles east of Flugga Light, on March 1 at 12.45 p.m., she met the Norwegian barque, Norma, 850 tons. It was a fine day, with a smooth sea, and the ship was sunk by gunfire, one man being wounded and another drowned. U.58 seems to have gone on to the westward and on March 8 was in 57° 40′ N., 11° 42′ W., some 110 miles due west of St. Kilda. She seems to have seen very little and may have sustained some damage, for she turned back, arriving home on March 14.

216. "U.48," March 1-16.—U.48 had been over a month at home when she left on March 1st to operate in the Channel. A signal she made off Terschelling at 4.40 p.m. was intercepted, and Dover was warned on March 2 at noon to expect her to pass after dark.²

She passed, however, that night in safety, and reported later that the patrols were weak and it was easy to travel on the surface. She received later a reminder of their presence. Two escort destroyers were returning from Havre that morning; T.B.22 (Lieutenant A. B. Wilson) was on the way back to Newhaven when at 7 a.m. (March 3) in 50° 27′ N., 0° 5′ E., he sighted a submarine on the surface, 8,000 yards to the south-east; he at once made for her at full speed, opening fire with his 12 pdr. The first round fell short; the submarine dived and after running some three miles Lieutenant Wilson dropped two depth charges, one of which failed to explode, which made him suggest that he should carry six.³

U.48 suffered little or no damage, for that afternoon (March 3) at 1.45 p.m., in 50° 8′ N., 0° 45′ W., she met the British S.S. Connaught, 1,029 tons, Havre to Southampton. She was going N., 8′ W., 18½ knots, when a periscope was seen on the starboard beam and almost immediately a torpedo struck the ship. It was followed by a second and the ship sank in 25 minutes. No patrols were in sight; the wireless was disabled; the crew of 77 got away safely and were picked up seven hours later by the hospital ship Grantully Castle.

U.48 went off to the westward and the next day March 4, at 1 a.m., some 20 miles south-west of Portland in 50° 12′ N., 2° 40′ W., met some coal trade ships which had been escorted out of Havre

¹ From information in Mine Sweeping Statements, H.S.B.170/95; German Statement O.U.6020A merely mentions that they were laid on south coast of Ireland. *Myosotis* gives position, 51° 24′ N., 9° 27′ W.
² M.63242/17 gives 51° 30′ N., 11° 18′ W.

³ Marine-Archiv attribute S.S. Cornelia and S.S. Sawa Maru to U.C.43.

¹ In 51° 23' N., 9° 30' W.

² I.D., Vol. 3026, War Diary; H.S. 645/133.

³ M.02686/17. E.1 Log, 3/8.

by a French destroyer, but had not picked up the British armed trawlers. She opened fire on the British S.V. Adelaide, 135 tons, Cherbourg to Cardiff, which remained afloat and was brought into Fowey the next day. At 1.30 a.m. (March 4) she sank the British S.V. MacBain, 291 tons, with bombs.

U.48 went on down Channel and was located by directionals, in 49° 27′ N., 4° 15′ W., off Devonport, in mid-Channel on March 6, at 5.5 p.m. Of the three destroyers of the 14th Flotilla, lent to Devonport to hunt submarines, the *Medina* and *Orestes* were out searching for submarines, and the *Orford* was doing French coal escort.¹

U.48 remained in mid Channel in the West and in the morning of March 7, in 49° 24' N., 4° 29' W., met and set fire to the Norwegian S.S. Navarra, 2 1,261 tons. She then made for the Eddystone, and it was probably she that at 2.40 p.m., March 7, in 50° 3′ N., 4° 40′ W., about 3 p.m., chased the S.S. Zambesi, 3,759 tons, which managed to get away by superior speed. Her conning tower was seen by the British S.S. Llanelly4 at 3.30 p.m. on the way from Cardiff to London, in 50° 6' N., 4° 33' W., but no attack was made; she was seen again that evening by the Norwegian S.S. Mohlenbris. 5 at 6.15 p.m., in 50° 2' N., 4° 30' W., partly submerged, going east, and her periscope was sighted the next day (March 8) at 11.30 a.m. She continued to cruise about off Devonport, evidently lying in wait for the coal trade, and on March 9 at 3 p.m., in 49° 56' N., 3° 51' W., met the British S.V. Abeja, 174 tons, sailing from Granville to Fowey, and sank her by gunfire. No patrols were in sight but the crew of five were picked up at 6 p.m. by a patrol vessel Zonia, and landed at Plymouth. U.48's cruise was to come to a dramatic end. She moved to the north-westward and at 5.45 p.m. (March 9), in 50° 11′ N., 4° 2′ W., 8½ miles west of the Eddystone, met the British S.S. East Point, 5,234 tons, going from London to Philadelphia. The weather was fine, but the sea rough, when U.48 sent a torpedo into her. Nothing was seen of the submarine but her conning tower, about 200 feet on the port beam, two minutes before the ship was struck. No patrols were in sight. The wireless was disabled and the 4.7 inch gun carried by the East Point did not fire. The ship sank in a quarter of an hour and the crew of 42 were picked up by the net drifter Expectant, which came up later.6 Nothing more was seen of the submarine, which had disappeared mysteriously. A serious accident had overtaken her. She had dived to attack

another ship¹ but when the East Point was abandoned her engines continued to move slowly ahead and, as she was sinking, U.48 got across her bows, which fouled the top of the conning tower,² carried away both periscopes, twisted the main periscope support and the whole conning tower, wrenching open the hatch and killing the captain, Lieut.-Cdr. Berndt Busz and the Navigating Warrant Officer. A mass of water entered the boat before the hatch could be shut. This brought her cruise to an abrupt end. She went down to 230 feet. The current was short circuited by the water and she lay for two hours before the tanks could be blown with compressed air. A Lieutenant in the reserve, Hashagen, took command and started for home north about, with a boat that could not dive.

On her way home on March 12, at 8 a.m., in 56° N., 10° 25' W. (Scotland West) she met the French barque Guerveur, 2,596 tons, from Glasgow to New Caledonia. It was very rough when the submarine opened fire at 2,000 yards. The ship put up a good fight with a 3.6 inch gun, but was hit repeatedly, set on fire and sunk. On March 13, U.48 rounded the Shetlands and on March 14 reported herself at 7 p.m., in 60° 32' N., 1° 30' E., with periscopes out of action and steering for Lynvig. There followed an attempt to run her down. The information was sent to the Commander-in-Chief3 on March 15 at 0015, and a destroyer flotilla was sent out to intercept her. They made a determined attack on a submarine, and thought they had sunk U.48, but it unfortunately turned out to be a British submarine G.12, which managed, fortunately, though hit, to get safely home (see S.112). U.48, too, got safely back on March 16. She had had an exciting cruise and had sunk three steamships and three sailing vessels, of 10,585 tons, which she reported as 12,000.

217. "U.53," March 1-17.—U.53 had been back 19 days when she sailed on March 1 for the West. She passed Dover Straits at noon on March 2 in a fog "fairly undisturbed." At 3.50 p.m., in 50° 36′ N., 0° 50′ E., 20 miles S.S.W. of Dungeness she met her first victim, the small British S.V. Gazelle, 91 tons, from London to Havre and sank her with bombs. Another small British S.V., the Utopia, 160 tons, London to Rouen, was lying becalmed close by, and she too was sunk. U.53 went on and on March 3, at 11 a.m., in 49° 36′ N., 5° 44′ W., some 30 miles south of Lands End, sank a Greek S.S. Theodoros Sangalos, 2,838 tons, on the way from Cardiff to Portland. The Goshawk picked up 22 survivors. U.53 evidently had orders to operate somewhere in lat. 51° to 52° from 7° W. to 14° 10′ W., for she appeared next some 200 miles West of the Skelligs, where on March 5, at 5.30 p.m., in 51° 50′ N., 13° 32′ W., she met

P. & M., March 6, page 20; H.S. 387/324, Telegram, Devonport.
 No details. Not in "Foreign Vessels Sunk or Damaged" mentioned in Marine Archiv (U.48) and in E.1 Log A.23/19.

No details. S.O.S. taken in March 7, 3 p.m. H.S. 387/488.
 Reported on March 9, at Ramsgate, E.1 Log A, March 9/6.

⁵ E.1 Log A, March 9/11.

⁶ M.63432/17.

⁷ One steamer to southward about 1½ miles (East Point's report).

⁸ Photo in Hashagen, U Boote Westwarts, p. 161.

⁹ H.S. 645/166.

the Italian S.S. Federico Confalioneri, 4,434 tons, going from Gibraltar to Glasgow. She was proceeding east by south, not zigzagging, and the first sign of a submarine was a torpedo which struck her the port side. No patrols were in sight; there was no time to send out wireless or to use the gun. The ship sank and the captain and 16 hands were drowned. Her next victim was to be snatched from her. This was the British S.S. Cornelia, 903 tons. which U.53 stopped some 40 miles to the eastward, in 51° 45' N., 12° 20' W., at 11.15 p.m. (March 5). The ship had already been abandoned and U.53 was getting ready to fire a torpedo when the sloop Poppy (Lieutenant Cosmo Hastings)1 came up and drove her down, got the crew on board, and for a couple of hours escorted her to the eastward, all in vain, however, for she never got home, being sunk off the Skelligs nine hours later. The next day, March 6. at 4.15 p.m., in 51°31' N., 13°9' W., the British S.S. Syndic, 2,727 tons, from Almeria to Barrow, was attacked: the submarine appeared on the surface right astern; the ship kept her astern and opened fire

with her 13 pdr., fired 41 rounds altogether. Night came and at

9.30 p.m., U.53 fired a torpedo at her which missed3 and the Syndic

U.53 then proceeded eastward towards the approach to St. George's Channel, and it may have been she that the sloop Zinnia met a couple of days later. On March 8 the Zinnia was cruising off the Fastnet waiting to escort the oiler Winnebago. At 10.30 a.m. she was in 51° 22′ N., 9° 16′ W., when a submarine was sighted S.S.W. about five miles off, steering east with conning tower up and decks awash. The Zinnia (Lieutenant-Commander G. F. Wilson) made for her opening fire with her foremost 4.7-in. gun, and got off eight rounds at about 8,800 yards, of which the last seemed to be a hit, before the submarine submerged.4 She appeared next in the approach to the Irish Sea, where on March 9 at 10 a.m., in 51° 7′ N., 6° 55′ W., she torpedoed the Italian S.S. Cavour, 200 tons, bound from Glasgow to Genoa with coal. She was proceeding on a course from the Tuskar to a position 100 miles N.W. of Cape Finisterre,5 though on March 7, when she sailed, there was no route open from Glasgow to the Mediterranean for British ships. From the Bristol Channel, however, the route down the Cornish coast was open and also the route from the Scillies westward (Route 86), and as the North of Ireland routes (43 and 75) were both open she could have been given a route out to 16° W. by them. But the routes available for British merchant vessels were apparently not given to neutral ships even when on Allied service. The ship sank

1 H.S. 650/84.

got safely away.

5 M.63316/17.

in six minutes and six lives were lost. The survivors were picked up by 0.24. Close to the Cavour was the Norwegian S.S. Lars Fostenes, 2.118 tons, from Cape Breton to Rotterdam, which U.53 had stopped earlier in the day with a shot in 51° N., 7° 5' W. At 12.15 p.m. (March 9) two torpedoes were fired into her, one of which hit. U.53 then made for the south coast of Ireland, and on March 10 may have been the submarine1 that at 12.30 p.m. in 51° 54' N., 6° 49'W., sank the small British S.V. T. Crowley, 97 tons, and the schooner Mediterranean, 105 tons. At 3.45 p.m. (March 10) the British S.S. Salvus, 2,050 tons, an Admiralty collier in ballast, going from Queenstown to Barry, saw the track of two torpedoes fired at her which missed. No patrols were in sight, but the Salvus was only a mile or so from land and got away by heading straight for the shore. The Russian S.V. St. Feador, 128 tons, from Faro to Liverpool, was in sight and U.53 stopped and sank her with gunfire about 3.30 p.m., only some 20 miles east of Queenstown.

The sloop Alyssum was patrolling in the area, and early on March 11 at 2 a.m., in 52° N., 7° W., saw the track of two torpedoes fired at her which both missed. U.53 was probably her assailant,² and moving westward along the coast was five miles off Ram Head at 7.30 a.m. (March 11). It was a misty morning, and through the mist she sighted in 51° 51' N., 7° 41' W., the British S.S. Folia, 6,702 tons, New York to Avonmouth, and sent two torpedoes into her. No patrols were in sight; the 12-pdr. gun did not fire, but a wireless message was sent out and an answer received. Seven men were killed and when last seen in the fog the submarine was firing into her.3 The confidential instructions for her route had been left on board, and it was thought that they might have fallen into the hands of the enemy, which made her loss the more serious. At 9.40 a.m., there came along the Spanish S.S. Gracia, 2,958 tons, Liverpool to Havana, and she, too, was sunk by gunfire in 51° 44' N., 7° 54' W., just as Q.24, the Laggan, appeared some five miles S.S.W. steering west, presumably in answer to the Folia's S.O.S. U.53 attacked her, but after firing 12 rounds saw her flashing to Q.16, which was also hurrying up, and the submarine went down.4 U.53 then made for home north-about, and the next day (March 12) off to Skelligs at 5.30 a.m., in 52° 2' N., 11° 23' W., met the Belgian S.S. Hainaut, 4,114 tons, New York to Calais, which she stopped and sank with a torpedo. The exhaust pipes of her diving tanks were damaged and she steered for home. The next morning (March 13) at 7.20 a.m., in 56° N., 10° 50' W., she met the S.S. Burgundy,

¹ This was the work of U.70 not U.53. Marine-Archiv, H.S./Q.18.

 $^{^2}$ Probably by U.C.43 which was sunk by G.13 off the Shetlands on March 10.

⁸ Marine-Archiv, March 20, 30,

Queenstown Station Report, H.S. 650/85. See, too, H.S. 648/17.

² U.61 reported (13/2030) sinking with two torpedoes a small cruiser with three raking funnels. The Alyssum had only two funnels (upright). Marine-Archiv report gives U.61 the Portuguese S.S. Angola at 1320 on 10th, over 210 miles away.

⁸ M.03101/17.

Queenstown, Deccy Ships, H.S. 648/55.

3,364 tons, going from Liverpool to Monte Video, and engaged her. The Burgundy had a 12-pdr. gun and made such good use of it and of a smoke apparatus she had rigged up in the mainmast that she got away. On March 14, at 6 p.m., in 60° 4' N., 3° 16' W., as U.53 neared the Orkneys she met another ship, the Norwegian S.V. Aguila, 1,092 tons, Aberdeen to Savannah, and sank her with gunfire. She passed by St. Kilda and Sule Skerry and made her position at least four times, reporting damage to the exhaust² pipes of the diving tanks; these signals were deciphered, but though information of U.483 was sent to the Commander-in-Chief, nothing apparently was said about U.53. She got safely back on March 17, having sunk seven steamers (25,164 tons) and six sailing vessels of 1,673 tons, a total of 26,837 tons, which she gave as 27,000. It is noticeable that of the steamships sunk or attacked, six were homeward bound, two outward bound and two coastal. Of the seven steamships sunk, only one was British (homeward bound) and six were neutral, which tends to confirm the view that the whole system of neutral sailings required revision. U.53 had been only once attacked by the sloop Zinnia and had been sighted by 0.24.

218. "U.61," March 1-18.—U.61, going north about, proceeded up the Danish coast by Lynvig on March 2, sinking that day in 57° 15′ N., 4° 15′ E., the Norwegian S.S. Edward Greig, 4 989 tons. Since February a number of neutral vessels had taken refuge in Kirkwall, and there they lay for weeks having to take their chance of getting home, for the Admiralty was not prepared to supply them with any information derived from intercepts as to the movements of German submarines, 5 nor to suggest a favourable day for sailing. The Danish S.S. Rosborg, 1,878 tons, with maize for Denmark, was one of these ships, and having left Kirkwall on March 3 she was sunk by U.61 on March 36 in 58° 46' N., 0° 15' W. She would have reached the S.W. approach about five days later, and was there when U.C.44 attacked Q.7 (the Penshurst) in 51° 17' N., 10° 5' W., on March 8. It appeared to be a large submarine that at 12.15 p.m. the Penshurst (Commander F. H. Grenfell), going S. 52 E., sighted two points on the starboard bow four miles off; the Penshurst turned at once as if to escape; the submarine followed and opened fire. The ship stopped and began to lower boats while the submarine continued firing, keeping well away at 2,000 yards with shots falling close and hitting the ship. Commander Grenfell, therefore, at

¹ C.B. 01370, p. 24; M.68446/17.

6 No details. German report says 7.55 a.m., E.1 Log C, 11/4, 18/7.

12.42 p.m. gave the order to open fire. The guns scored what appeared to be two hits (one 12-pdr. and one 3-pdr.) before the submarine submerged.¹

She must have gone off to the S.W., for on March 9 at 11.15 a.m. she was in 50° 26′ N., 10° 45′ W., 75 miles south-west of the Fastnets, and after stopping the Norwegian barque Spartan, 2,287 tons, sank her with gunfire and a torpedo. The crew landed at Baltimore (Co. Cork) and Cape Clear. U.61 then took a long stretch to the southward, and on March 10, at 1.20 p.m. in 48° 34′ N., 8° 26′ W. met the Portuguese S.S. Angola, 2,870 tons, from Barry to Lisbon. A heavy swell was running when the bombs were put on board and a torpedo was sent into her to hasten this effect. No patrols were in sight and the wireless was disabled by the explosion. The crew of fifty-two all got away, though fourteen of them were to spend two weary days in a boat before they were picked up by the S.S. Semantha. The Angola had sailed from Barry on March 9 and was apparently following "Route 86," which ran 90° west from the Scillies to cross 10° W. between 49° 30′ N. and 48° N.

U.61 retraced her course to the Fastnet and on March 13, at 0.15 a.m., in 52° 11' N., 11° 7' W., 14 m. W.N.W. of the Blaskets, fell in with the British S.S. Northwaite, 3,626 tons, from Tunis to Dublin. It was a clear moonlight night with a westerly Atlantic swell running when a torpedo struck the ship the port side. No patrols were in sight; the 4.7-inch gun with which the ship was armed did not fire; an S.O.S. was sent out and was acknowledged by Crookhaven (Mizen Head). In answer to it the sloop Camellia came up a couple of hours later; the ship had sunk and she could only pick up the crew of thirty-two, who were landed at Berehaven. U.61 then went west, and at 3.5 a.m. (March 13) in 52° 5' N., 11° 45' W., 2 met an oiler, the British S.S. Luciline, 3,675 tons, going from New York to Calais, escorted by the Lavender, stationed 500 to 600 yards before her port beam. Suddenly in the darkness of the morning a torpedo struck the ship, which saw nothing of any submarine. Thirteen men were drowned and the remainder were picked up by the Lavender, which succeeded with arduous effort in getting the ship in tow and brought her safely to Ventry Harbour (Dingle Bay), where she was beached.

U.61 proceeded north-east. She had only one torpedo left, but it scored a distinct success. This was against the Warner, a Queenstown "Q" ship, Q.27 (Acting-Commander Thomas W. Biddlecombe, R.A.N.), which had been cruising off the Shannon since March 3, on her first trip. On March 13, at 8.45 a.m., she was in 52° 30′ N., 11° W., steering S. 55 E. at 10 knots when the wake of a torpedo was seen 100 yards off on the port quarter. The helm was put hard a-starboard—too late—the torpedo struck her on the port quarter.

² March 13, 2030, 57° 50′ N., 8° 55′ W.; March 15, 1900, 58° 39′ N., 3° 53′ E.

³ March 15, 0015 in H.S. 645/157, 173; see, too, U.48.

⁴ No further information seen.

⁵ No papers have been seen on this subject but it is known that Vice-Admiral Sir Frederick Brock asked for information. Intercepts had been received of U.61 going north on March 1 and March 2.

¹ H.S. 648/26. This was U.C.44. (Marine-Archiv H.S./Q.28.)

² 11° 21' in Queenstown report, H.S. 650/115.

She sank in five minutes.¹ It was a cold bleak day. The port lifeboat floated off. The starboard was lowered but was sucked in and capsized as the ship went down, injuring Lieutenant Milne very severely. The submarine then came up, and after picking up some of the men in the water, including the captain, navigating officer and three ratings, went off with them as prisoners to the north-east. There was a heavy swell running. The water was very cold, and it took some time for the port lifeboat to right the boat that had capsized. It was done at last, but meanwhile Lieutenant Milne had succumbed to his injuries and was buried at sea; some thirteen men were never seen again.

By 6.40 p.m. the two boats had set sail for land which was sighted at dawn on March 14. At 1.0 p.m. that afternoon the conning tower of a submarine rose from the sea. For a moment they thought they were to become prisoners. But it turned out to be D.3, which took them all on board and landed them at Galway early on March 15.2 She was one of the submarines sent round to Lough Swilly in February to work in the Atlantic against enemy submarines, but they had had little luck that month.

By this time *U*.61 was well on the way home. On March 13 at 8.30 p.m. directionals placed her in 54° 24′ N., 11° 35′ W., north-west of Ireland, and on March 14, at 6.10 a.m., in 56° 10′ N., 11° 12′ W., she met the British S.S. *Tortuguero*, 4,175 tons, and opened fire on her. It was still dark, but the ship turned away and opened fire at the flashes. At 6.50 a.m. the submarine could be seen to the W.S.W., but disappeared in a rain squall about 7.30 a.m. She reported herself in the north in 59° 12′ N., 9° 35′ W., at 3.50 p.m. (March 14) and was back by March 18, having sunk a "Q" ship and five ships (four steamships and one sailing vessel) of 11,650 tons, which she gave as 20,000.

219. "U.62," March 1-24.—U.62 sailed on March 1 with U.53 and U.61, and going north about was probably off the S.W. of Ireland on March 6. The next day (March 7) at 7.20 a.m., in 51° 39' N., 11° 30' W., some miles west of the Skelligs, she met the British S.S. Baron Wemyss, 1,604 tons, going from Lisbon to Glasgow. The ship was steering N. 45 E. and turned away when the submarine opened fire at long range; the latter gradually overhauled her. The ship had no wireless and the gunners at the 12-pdr. gun could only see momentary glimpses of a periscope. The master abandoned the ship and U.62 came up and torpedoed her at 9.15 a.m., taking the master and chief engineer prisoner. She continued to cruise on the Fastnets approach, and on March 8, at 10.30 a.m., in 51° N., 12° 10' W., met the Norwegian S.S. Storstad,

German report says three.

6,028 tons, a Belgian relief ship from Buenos Aires to Rotterdam, following a course given by the naval authorities at Gibraltar. There were no patrols in sight, and the ship after being abandoned was sunk by a torpedo. Not far off, in 51° N., 12° W., the Russian barque Vega, 400 tons, from West Indies to Fleetwood with logwood, was stopped at 6.10 p.m. (March 8) and sunk by gunfire in a heavy sea. The master who, in the hurry of departure had been left on board, was lost. U.62 then made for the Cornish coast, where at 5.30 a.m. on March 11, in 50° 38′ N., 5° 23′ W., she met and sank a small fishing vessel, the Thrift, from Milford Haven, which was lying becalmed there at the time.

U.62 then shaped course west, and was probably the submarine that at 7.15 a.m. (March 11) in 50° 38′ N., 5° 59′ W.,* attacked the British S.S. Eddystone, 813 tons, Greenock to London. The ship was zigzagging at 10 knots, and though no patrols were in sight the submarine was well astern; the ship had a 3-pdr. gun, which opened fire and she got away.

U.62 then made a long cast to the west, and the next day (March 12) at 6 a.m., in 49° 52′ N., 8° 2′ W., off the Bishop's Rock, met the U.S.S. Algonquin, 1,805 tons, from New York to London. It was a fine day and the sea was calm. No patrols were in sight and the submarine stopped and sank her with gunfire and bombs. The crew of twenty-six took to the boats and were picked up by a lifeboat off the Scillies.

At 10.25 a.m. (March 12), some 20 miles to the south-west in 49° 34' N., 8° 12' W., she attacked the British S.S. Semantha, 2.846 tons, going from Cardiff to Genoa. The submarine was right astern when she opened fire at 9,000 yards. No patrols were in sight, but the ship replied stoutly with a 12-pdr. 12 cwt., and with the help of smoke-boxes which she used, managed to get away. In sight during the chase was the French full-rigged S.V. Jules Gomez, 2,200 tons, on a westerly course from Ipswich to Bahia Blanca. The submarine opened fire on her at noon (March 12) in 49° 10' N., 8° 50' W., and she sank at 2 p.m. The crew of twentythree got into boats and were picked up off Trevose Head that evening. The Norwegian S.V. Collingwood, 1,042 tons, from Buenos Aires to Christiania with maize, had seen her sunk, and at 2 p.m., in 49° 24' N., 9° 7' W., was herself stopped and sunk with bombs. The crew of thirteen all got away and were picked up twenty-four hours later by the A.T. John Meikle on the Cornish coast.

The next day, March 13, in 49° 15′ N., 10° W., at 3.45 a.m., U.62 met the Swedish S.V. Dag, 400 tons, from Mexico to Falmouth. It was a fine day when the submarine came up close alongside and sank her with bombs. The crew of eight and the captain's wife were three days in a boat before they made the Coningbeg Light Vessel and were hauled up exhausted.

² H.S. 389/707; H.S. 648/58. Lieut. F. J. Yuile, R.N.R., report; Enquiry at Queenstown, H.S. 648/94.

^{* 22} miles off last position, but both may be in error.

U.62 seems to have turned to the eastward, for at 1.35 p.m. (March 13) in 49° 24′ N., 9° 12′ W., a submarine attacked the British S.S. *Trecarne*, 4,196 tons, from Barry to Port Said. The sea was rough; the ship returned the fire and the submarine after firing three rounds disappeared.

The next day (March 14) at 10.15 a.m., in 48° 45′ N., 12° 8′ W., she met the British S.S. Rose Lea, 1,617 tons, Cardiff to Malta. It was fine weather and the ship was proceeding south-west at eight knots when she was suddenly torpedoed; no patrols were in sight; the 3-pdr. gun did not fire; she had no wireless. The ship went down; the submarine came up and her captain hailed the boats and was told that the master (who was disguised and pulling an oar) had gone down. The officers and crew of twenty-six all got away in her two boats, both of which were picked up at sea. U.62 was now on her way home north-about. On March 23, in the North Sea, she sank a Dutch trawler, the Tres Fratres, and was back on March 24.

Including the Algonquin (which is not mentioned by Marine Archiv) she had sunk eight ships (four steamships and four sailing vessels) of 16,196 tons. Of these only two were British.

220. "U.C.44," March 1–15.—U.C.44 was a High Sea Fleet mine-layer. She left Heligoland on March 1, and proceeded by the Channel on her way to lay mines on the south coast of Ireland. On March 5, at 11 a.m., in 50° 40′ N., 7° W., some 80 miles south from Queenstown, she met the Portuguese S.V. Guidana, 326 tons, from Oporto to Cardiff, and set her on fire.

She was off Queenstown by the night of March 6, and after laying six mines off the entrance to the harbour proceeded along the coast, dropping three off Mine Head, four off Ballycotton Lighthouse (March 7) and five off Waterford.*

The ones off Queenstown had barely been laid when the British S.S. Westwick, 5,694 tons, with a cargo of 10,000 tons of maize, on the way from Baltimore to Hull ran on one of them at 1.30 a.m., March 7, and was blown up.

U.C.44 returned north-about and sank four ships on her way home. The first was the Norwegian S.S. Adalands, 1,577 tons, West Africa to Hull, which she met off the Fastnet in 51° 15′ N., 9° 48′ W.), at 7.30 a.m., on March 8. No patrols were in sight; the ship had no wireless, and was sunk by gunfire. Five hours later, in 51° 17′ N., 10° 5′ W., at 12.15 p.m., she was engaged by the Penshurst (see S. 218) but was not hit. Her next victim was in the North Sea, where, on March 12, at 3.10 p.m., she met the Norwegian S.S. Marna, 914 tons, Leith for Stavangar via Lerwick, in 58° 30′ N., 1° 10′ W., and sank her with gunfire. She evidently hung about in the same

area for some hours, for at 5.30 p.m., in 58° 27′ N., 1° 18′ W., she met the British S.S. *Lucy Anderson*, 1,070 tons, Hartlepool to Gothenburg, and sank her with gunfire. She took a British fishing vessel, the *Nuttalia*, 229 tons, prize that day, and the next day (March 13) sank, with bombs, a small fishing vessel, the *Navenby*, 167 tons, in 57° 40′ N., 0° 40′ E., and arrived back in Heligoland with her small prize on March 16. She had sunk three steamers and two sailing vessels of 3,954 tons, and her mines had blown up a ship of 5,694 tons.

221. "U.85," sunk by "Q.19," March 12.—U.85 sailed for her third trip on March 7 and proceeded via Dover. Her movements remain obscure, but she seems to have cruised between the Isle of Wight and Cherbourg.

It was she and U.C.66 that on March 11, at 4.45 a.m., off Newhaven, i.e., in about 50° 40' N., 0° 8' E., opened fire on the small "O" ship, the Bayard (0.20), a lugger fitted with a motor and armed with one 13-pdr. and one 3-pdr. Q.20 was on a course S.E. when a submarine on the starboard quarter opened fire. A few minutes later another on the port beam opened fire. The wind seems to have been about S.W., and bringing the ship round to N.W., Lieutenant Walter Scott, R.N.R., sighted a submarine close on the port quarter. The order was given to get the boats out. The submarine was brought on the port beam, and at a range of only about 75 to 100 yards, Q.20 opened fire. The submarine returned the fire immediately, and a shell struck the ship, wounding two men. Down went the submarine, but four rounds were got off from each gun. Two explosions were seen1 in the submarine, which was about 200-250 feet long. H.M.S. Forester came steaming up and cruised round about while Q.20, which was badly holed, made for land.

For this action £200 was awarded to the ship; Lieutenant Walter L. Scott, D.S.C., R.N.R., was awarded a bar to his D.S.C.; Skipper Joseph Cowley received the D.S.C., and two seamen a D.S.M. Lieutenant Scott never received his in person, for Q.20 was sunk by collision on March 29; her captain and twelve men were drowned and the bar to his decoration had to be presented to his widow.

This action was with U.C.66; the second submarine was probably U.85, which was sunk by Q.19 the next day (March 12).

It may have been U85, too, that was sighted by the A.T. Everton, on March 11, at 4.35 p.m., in 50°3′N., 1°14′W., in mid Channel.

^{*} Fields 109, 110, 111, 112, 113, 114 of 1917 in O.U. 6020A, German Statement of Mines.

¹ Second and third shot of 13-pdr. (M.03165/17.) H.S./Q28.

² H.S. 393/88, C.-in-C., Portsmouth, Telegram 580 of March 29, 1917. The date June 26, 1917, in Navy Losses is an error.

³ For report M.04335 in A.2427/1917.

The Everton (Lieutenant J. T. Rowe, R.N.R.) was a Portsmouth armed trawler and was steering N, by E, & E., when a large type submarine was seen four miles off half a point before the starboard beam.1 The Everton altered course to E.N.E., but as the submarine was increasing its distance she opened fire at 3,500 yards, and after firing fourteen rounds from her single 3-pdr. all of which fell short, the submarine went down.2 The next day, March 12, at 6.15 a.m., it was probably she that in 49° 53' N., 3° 15' W., met the French S.S. Marquise de Lubersac, 882 tons, going S. 83 E. at six knots, on the way from Barry to Rouen. The ship was armed with a 3.6-inch gun, and turning to bring the submarine astern, opened fire and got away. This was the dawn of U.85's last day. At 2.50 p.m. she was in 49° 51½' N., 3° 10' W., only a few miles from the same spot when she sighted a small steamer steering S.E. and fired a torpedo at her. It missed, passing under the ship, and she rose to the surface at 3.5 p.m. and opened fire, getting in five hits, one of which burst among the "panic" party, causing several casualties and destroying one boat and the falls of the other. The "ship" had stopped. She was the Privet, Q.19 (Lieutenant-Commander C. G. Matheson, R.N.R.), armed with four 12-pdr. guns, proceeding in accordance with her programme from Lands End to Alderney at nine knots. At 3.25 she suddenly dropped her scantlings and opened a heavy fire, getting off nine salvoes before the submarine went down. U.85 never returned, and this was the last that was heard of her.3

222. "U.81," March 6-27.—U.81 left Emden on March 6, intending to go, like U.85, by the Channel, but possibly on account of a leak went north-about. On March 10, at 1.30 p.m., 60 miles east of the Shetlands, she stopped the Norwegian S.S. Skreien, 250 tons, Bergen to Newcastle, and sank her by gunfire. Another Norwegian S.S., the Algol, 988 tons, suffered the same fate the same day.4

She took a course well to the westward, and on March 13, at 6.30 a.m., in 56° 11′ N., 13° 4′ W., met the British S.S. Coronda, 2,732 tons, Glasgow to St. Georgia, with 2,000 barrels of oil, and sent a torpedo into her. The weather was fine; nothing was seen of the submarine; no patrols were in sight; the ship had no wireless, and the 12-pdr. gun was not fired. Two men were killed by the explosion and seven by the capsizing of a boat. Twenty-one survivors, making their way to land, were picked up by the S.S. Durango and taken to Halifax. The master was apparently not following his instructions, for the position some 200 miles from Inishtrahull

¹ E.1 Log, Reports, Channel 9/4, 10/4.

2 Portsmouth Auxiliary Patrol, H.S. 595/153.

4 No record of details. Position 60° 20' N., 0° 50' E.

(Ireland, N.) indicated that he must have left Inishtrahull about dawn the day before, instead of at dark according to his instructions.

U.81 went on to the Blaskets (Ireland S.W.) area and the next day, March 14, at 9 a.m., somewhere in 52° 1′ N., 11° 29′ W.,¹ met the British S.S. Paignton, 2,016 tons, Gibraltar to Glasgow, which was steering E.S.E.; she sighted the submarine on the surface almost right astern; a heavy swell was running; the submarine opened fire; it was far out in the Atlantic and no patrols were in sight; the ship had no wireless, and though she replied to the fire with her 12-pdr. gun, the ship was stopped and sunk by gunfire. But though nothing was in sight at the time, Q.16 (the Heather, Lieutenant-Commander W. W. Hallwright) was in the neighbourhood, and coming on the boats kept a sharp lookout for their assailant.

At 12.10 p.m. (March 14), in 52° 6′ N., 12° 34′ N., steering east with an American ensign flying, she sighted a submarine on the surface and turned to bring her astern. U.81 opened fire at about 7,000 yards and gave chase. When the submarine had closed to 4,000 yards, the boats were turned out and lowered. The submarine closed to about 1,000 yards turning towards the boats and coming up one point abaft the beam with her crew on deck. Unfortunately the Heather's chance was spoilt by the sloop Daffodil coming in sight just then, which alarmed U.81, and she started to dive. Q.16 tried to get the guns into action, but the submarine went down too quickly. A torpedo passed under the stern and Q.16 seeing a periscope about 50 yards off waited for the wash at the starboard bow and dropped two depth charges, both of which exploded, with the usual accompaniment of oil and bubbles.²

Lieut.-Commander Hallwright was awarded a D.S.O., but, unfortunately, never received it, being killed by a fragment of shell when fighting another submarine a month later.³ U.81 evidently received a shock, for she did not appear again until March 17, when at 12.45 p.m., some 200 miles to the southward in 48° 35′ N., 10° 29′ W., she fired a torpedo at the British S.S. Ruahine, 10,757 tons, going S.62 W. at 11½ knots, on the way from London to New York. The torpedo missed astern and across the swell appeared a glimpse of the submarine some 1,200 yards off on the starboard quarter. The ship made at full speed to the south-east for three hours and saw nothing more.

The next morning, March 18, at 6 a.m., in 48° 30′ N., 12° W., U.81 met the British S.S. Pola, 3,061 tons with 5,000 tons of coal from Cardiff to Norfolk. She was torpedoed without warning,4

³ No German submarine that returned reported any encounter at that time or place. Her captain was Kaptlt. Willy Petz.

M.63468/17 says 70 miles due west of Blaskets, i.e., about 12° 23′ W.
 M.03447/17 in Decoy Ships, H.S. 648/64. U.81 reported a submarine trap with an American ensign. The depth charge damaged U.81's engine.

April 21, 1917, U.84 (S. 319).
 No record of details.

nothing was seen of the submarine; five of the crew were drowned, and the remainder were landed at Gibraltar.

That same forenoon (March 18), at 10.45 a.m., in about 48° 40′ N., 11° 29′ W.¹ she met the British transport *Trevose*, 3,112 tons, on the way from the Tyne to Italy with 6,000 tons of coal and sent a torpedo into her. No patrols were in sight; the ship had no wireless; her 13-pdr. gun did not open fire and she sank within an hour. Two firemen were killed, but the remaining 25 of the crew were picked up by the British S.S. *Alnwick Castle*, 5,900 tons, on her way to Ascension and Capetown.

U.81 probably followed hard upon her track, for at 6.15 a.m. the next morning (March 19), in 47° 44′ N., 13° 20′ W., 2 she sent a torpedo into the Almwick Castle, which at once sent out an S.O.S.; nothing was seen of the submarine, and her 12-pdr. gun got no chance to fire. It was fine weather and the crew and 19 passengers, 100 in all, got away in the boats. Three days passed; sixty were picked up on March 23 by the French S.S. Venezia, labouring in a heavy sea 300 miles W.S.W. of Ushant; they were in a terrible state with the last ration of water gone; forty were never heard of again.

In sight of the Alnwick Castle when torpedoed, was the British S.S. Frinton, 4,194 tons, with a cargo of 7,000 tons iron ore from Cartagena to Middlesbrough. At 9.40 a.m. (March 19), in 48° N., 13° W., U.81 sent a torpedo into her which hit the boiler room and sank her. Her 12-pdr. 8-cwt. gun had no chance of firing. Four men were killed and the remaining 32 were picked up by S.S. Southville, after sixty hours in the boats.

U.81 then made for home, apparently running up the longitude of 13° W., for on March 22, at 6 p.m., in 54° 55′ N., 12° 50′ W., she met the Norwegian S.S. Attika, 2,306 tons from Barry to Sandkey (Florida). The submarine was sighted on the surface on the port beam and sank the ship by gunfire.

Passing down the North Sea, she sank three more Norwegian ships. On March 25 she torpedoed the Norwegian S.S. Laly, 1,880 tons, the Norwegian S.S. Garant, 735 tons, and the C. Sundt, 1,105 tons. She was back by March 27 having sunk twelve ships and the respectable total of 29,399 tons, which she reported as 30,000.

223. "U.54," March 8-April 3.—U.54 left the Bight on March 8, and going north-about passed St. Kilda on March 12. By March 15 she was off the Fastnets and at 11.30 a.m., in 50° 58′ N., 9° 36′ W., met the French S.V. Eugene Pergeline, 2,203 tons, going from New Caledonia to Glasgow, and sank her with gunfire. Off Cape Clear

at 3.30 p.m., that day (March 15) she stopped the British Hospital Ship *Essequibo* from Canada to Liverpool, and allowed her to proceed. Her further movements are obscure.

She may have been the submarine that, away to the westward, on March 23, in 49° N., 15° 50' W., attacked the British S.S. Crown of Grenada, 2,746 tons, London to Barbados. The weather was clear and the ship was steering west-by-north, when at 7.40 a.m., a submarine rose to the surface ahead. The ship at once turned to bring her astern and opened fire with a 12-pdr. The submarine gave chase, but submerged at 9.15 a.m., and was not seen again. The British S.S. Shimosa, 4,221 tons, Newport, Mon., to Halifax, which had been in sight some eight miles to the eastward, when the submarine rose, had turned and escaped to the south-east. Her turn, however, came the next day (March 24). At 5.50 a.m., in 48° 24' N., 20° 16' W., she was on a course S. 76 W., when a submarine was sighted to the north-west.1 She at once turned southeastward, increased to 11 knots and opened fire with a 13-pdr. They exchanged some 60 rounds and after a chase of two hours, the submarine disappeared.

She evidently went home, for she was in the North Sea by April 1. On March 29, at 8.45 p.m., six miles N.N.E. of Whitby, she met the Belgian S.S. Schaldis, 1,241 tons, going from Tyne to Calais, and sent a torpedo into her. Though she went down in one minute, only one man was lost, the remainder being picked up by two A.T's., the Vidette and Active.

U.54 appeared next to the northward on April 1st, at 3.30 p.m., in 58° 45′ N., 2° 15′ E., on the Shetland-Norway route, when she sank the Norwegian S.S. Consul Persson, 1,835 tons, Bergen to Middlesbrough. The Norwegian S.S. Havlyst, 3 532 tons, was also sunk by her on April 2 and she reached Heligoland the next day (April 3). She had sunk three S.S. and one S.V., of a total of 5,811 tons.

224. "U.24," March 12-April 9.—U.24, the submarine that had sunk the Formidable in January 1915, and had made an excursion to the Irish Sea in August 1915, left Emden on March 12, with orders to operate to the westward of the Fastnet and in the Bristol Channel. She appeared first some 200 miles west of the Fastnet, where on March 21, at 7.15 a.m., in 50° 46′ N., 15° 40′ W., she met the British S.S. Stanley, 3,987 tons, Newport News to Cherbourg. Snow was falling on a heavy sea when U.24 sent a torpedo into her. No patrols were in sight; the ship had no wireless and the 12-pdr. gun

¹ Chief Officer's report, N.I.D. 12053/17; the position seems doubtful. ² Master's report. I.D., Vol. 637.

³ E.1 Log, C.6/3 says she got into Frederikstad.

No details. Probably on Lerwick to Bergen line.

Report says south-west, but this does not agree with "2 points on starboard quarter." M.05045/17.

² Marine-Archiv attributed the *Schaldis* to *U.54* owing to a mistake in the date of her loss. It was probably *U.B.21* (see S. 276).

³ No details.

had no target. Five men were killed by the explosion. The remainder got away in two boats; 14 men in one, of whom one died of exposure, were picked up by S.S. *Mokte* on March 27 and taken to Dakar; 17 men in the other, of whom two died, were picked up by a Cunarder and landed at New York.

U.24 did not go on to the Bristol Channel, as the bearings of one of the Diesel motors were giving trouble. On March 22, at 7.30 p.m., somewhere about 50° 34′ N., 15° 45′ W., she met the Norwegian S.V. Svendsholm, 1,998 tons, and sank her by gunfire.

She moved north-eastward and on March 24, at 7 a.m., in 51° 40′ N., 14° W., met the British S.S. Coronado, 6,539 tons, on her way to Avonmouth. The Coronado sighted her 2½ miles abaft the beam, just as a shot whistled over the funnel. The Coronado turned at once to bring her astern and went off at full speed, opening fire with her gun. After exchanging about a dozen shots, the submarine dropped astern and gave up the chase.

U.24 moved south and two days later, March 26, in 47° 42′ N., 13° 11′ W., met the British S.S. Kelso Moor, 3,174 tons, going to Middlesbrough on Admiralty Charter. It was blowing a gale and a heavy sea was running at 4.38 p.m., when a periscope was seen on the port beam and the track of a torpedo passed astern. The ship had no opportunity of using her gun but keeping the submarine astern got safely away. It was last seen at 5.18 p.m.

The next day, March 27, in 48° 20′ N., 12′ W., U.24 met the British S.S. Glenogle, 7,682 tons, on the way from London to Genoa with a general cargo. The ship was going S. 80 W. 12 knots, when at 4.15 p.m., a periscope was sighted on the port bow. The ship was armed with a 4.7-gun, but almost immediately two torpedoes hit her and she went down. Of the crew of 95, 19 were lost; the remainder were picked up and landed in Falmouth.

U.24 proceeded eastward and on March 28, at 10 a.m., in 49. N., 10 W., met the British S.S. Cannizaro, 3,898 tons, going from New York to Hull. It was drizzling, with nothing in sight, when she was hit by a torpedo the starboard side; the wireless was disabled; the 4.7 gun did not open fire; the ship sank in about an hour. All the crew of 39, after taking to the boats, were picked up at 7 p.m., and landed at Falmouth.

This was U.24's last ship. She had met with very heavy weather, and sunk three S.S. and one S.V., with a tonnage of 17,565 tons, which she gave as 20,000. She got back to the Ems on April 9th, without further adventure.

225. "U.46," March 12-April 11.—U.46 had carried out a long cruise in December off Finisterre and she now sailed again on

March 12 to operate off Bordeaux and the Bristol Channel. She went north-about and on March 21, at 2.40 p.m., in 51° 25′ N., 13° 30′ W., met the British S.S. *Hindustan*, 3,692 tons, Halifax to Queenstown. A gale was blowing with a heavy sea when the ship was suddenly torpedoed; no patrols were in sight; the wireless was disabled; the ship sank in an hour. The crew, after three days and nights in the boats, were picked up and landed at Queenstown and Cardiff with a loss of two out of thirty. *U*.46 went on to the southward and on March 23, at 5.30 a.m., in 47° 28′ N., 12° W., met the Portuguese S.V. *Argo*, 1,563 tons, New Orleans to London. A heavy swell was running when she was sunk by gunfire and bombs.

The next day (March 24) U.46 was in the Bay and at 9 p.m., in about 45° 55′ N., 5° 30′ W., came up with a convoy of four French ships. It was pitch dark with a heavy sea and a strong wind. She fired a torpedo at the French S.S. Niemen, 1,888 tons, which missed by six feet astern. Another torpedo hit the French S.S. Montreal, 3,342 tons, Bordeaux to Hayti, the rear ship. The wireless was demolished; the ship sank; the crew and thirteen passengers after 36 hours in boats in icy cold weather, were picked up by a patrol boat. The ship was still afloat in 45° N., 7° 30′ W., on March 26, when Q.4 boarded her and just before she sank rescued a boy who had been left asleep on board.

U.46 must have followed the convoy to the westward, for at 5.30 a.m. (March 25) she opened fire on the Niemen, in 45° 20′ N., 7° 50′ W., the Niemen returned the fire at 6,000 yards and after a five hours' chase, got away.

U.46 then went down to the angle of the Bay and on March 28, at 8.45 a.m., in 43° 43′ N., 1° 50′ W., attacked a south-going French convoy of some 18 ships coming along the coast, escorted by a French gunboat, the Sans Souci, and two armed trawlers, but her torpedo fired at the British S.S. Le Coq, 3,419 tons, Bordeaux to Philadelphia, missed again. An hour later (March 28), at 9.30 a.m., a few miles to the south-west, in 43° 32′ N., 1° 46′ W., two British S.S., the Gena, 2,784 tons, and Sydney Reid, in a convoy, escorted by a French gunboat the Isère, sighted a submarine and all three opened fire on it. The submarine went down and did not attack.²

U.46 hung about in the area or may have passed the word to U.C.69, which was working off the Gironde, for on March 29, at 11.45 p.m., in 44° 14′ N., 1° 38′ W., a north-going convoy was attacked on its way up the coast and the Norwegian S.S. Britta, 2,061 tons, on the way from Bilbao to Middlesbrough, with 2,955 tons of iron ore, was torpedoed and sank rapidly. The moon was shining over a rough sea. She was in a convoy of 12 ships escorted

¹ Signal, March 22, 2200. ² No further details on record.

¹ H.S. 648/123. ² N.I.D. 11878/17; Vice Consul Bilbao.

by the French gunboat Sans Souci and two sloops¹ and some of the convoy were showing lights.

U.46 appeared again off Brest when on April 1st, at 9.30 p.m., nine miles S.S.W. of Ushant in 48° 20′ N., 5° 20′ W., she met the American S.S. Aztec, 3,508 tons, New York to Havre. The weather was bad and it was very dark, but U.46 managed to send a torpedo into her. The wireless was demolished; the ship had two 3-inch guns, but no target could be seen in the blackness of the night. She went down in 20 minutes. U.46 proceeded to the westward, and on April 3, at 10.15 a.m., in 49° N., 7° 40′ W., sent a torpedo into the Russian S.S. Hesperus, 2,231 tons, with coal from Barry to Marseilles. The ship was finally sunk by gunfire.

U.46's cooling apparatus broke down that day and compelled to abandon the idea of going to the Bristol Channel, she turned home. It may have been she that on April 4 at 2230, off the Scillies in 49° 40' N., 7° 31' W., torpedoed without warning and sank the British s.s. Hunstanton (4,504 tons) with wheat from Australia to Falmouth. On April 5 she was abreast of the Fastnet when at 10.40 a.m., in 51° 20' N., 12° 30' W., she met the British S.S. Benheather, 4,507 tons, Halifax to Falmouth. The latter had a 12-pdr. gun but nothing to fire at, and U.46 sent a torpedo into her, which hit her on the starboard side. O.13 (the Aubretia) then came in sight some miles off and U.46 made for her and fired a torpedo at her which missed (10.57 a.m.). About 11.30 a.m. she sent another torpedo into the Benheather, but her lading of timber held her up and she did not sink.2 The Benheather had sent out an S.O.S., and the sloops Poppy, Primrose and the destroyer Magic were all hastening to her help. E.32 was working with 0.13 and waiting by the wreck saw U.46 approaching about 2.15 p.m. U.46 began to shell the wreck, and at 3.15, at 1,000 vards, E.32 let go both bow tubes and the port beam tube, but all three missed.

The Benheather was still afloat on April 6, for the Parthian tried in vain to sink her that day by gunfire, but she disappeared the next day leaving the sea strewn with timber. There had been some hope and a chance of saving her, but arrangements for salvage had not then reached the pitch of efficiency they subsequently attained.

After this protracted contest U.46 continued to the north, and on April 7, at 4 p.m., 10 miles W.S.W. of St. Kildas, met the Norwegian S.V. Fiskaa, 1,634 tons, Galveston to Copenhagen, with oilcake. The ship was on her way to Stornoway with a British armed guard of one Sub-Lieutenant, R.N.R., and five men put aboard by the Changuinola. The submarine appeared one mile

astern and ordered the crew to leave. The master dressed up the armed guard and they escaped safely in the boats with the rest of the crew and landed at St. Kilda that evening.

U.46 may possibly have heard of the chase of U.57 by the A.T. Rushcoe Castle the day before, for no sooner had the crew left than she at once torpedoed the ship, which sank in two minutes.

U.46 got back safely to the Bight on April 11, having sunk eight ships (six steamers and two sailing vessels) and 22,537 tons. She had had an exciting cruise and had narrowly missed destruction by E.32.

225A. "U.66," March 13-April 11.—U.66 left Emden again on March 13 to examine and report on the North Channel. On March 22, at 7.50 p.m., in 55° 25′ N., 11° 26′ W. (Ireland, N.W.), she met the British S.S. Stuart Prince, 3,246 tons, Manchester to Mediterranean with coal and torpedoed her. The ship was armed with a 13-pdr. gun which did not fire; no patrols were in sight; the wireless was disabled; it was very dark and the ship sank almost at once; one boat was sunk by the ship coming down on it and out of thirty-eight in the crew only eighteen were saved.¹

The next day (March 23) at 1.30 a.m., U.66 reported that the North Channel did not offer any prospects, and went off to the south coast of Ireland, where on March 27, at 8.30 a.m., in 51° 2' N., 9° 12' W., she torpedoed the British S.S. Neath, 5,546 tons, from Mauritius to Havre. Though the ship sank in four minutes the crew all got away and were picked up by the patrol boat Sarba (Queenstown) that evening. The master, Captain Wm. Griffiths, was taken prisoner and was in her when she made to the westward on March 28 and was forced to submerge twice for a British destroyer.2 A westerly gale was blowing hard for the next week and she was mostly on the surface. On April 3 she was still lying off the Fastnet, but had seen nothing and turned for home. She was possibly the submarine sighted by the A.T. Rushcoe Castle (Lieutenant J. T. Randell, R.N.R.) off the Flannan Isles in about 58° 20' N., 7° 30' W., on April 5. The Rushcoe Castle chased her to the westward, opened fire on her in a heavy sea with her 12-pdr. at 11.30 a.m.; the submarine replied for a time, but finally went down about 11.50 a.m., and a quarter of an hour later the Rushcoe Castle sighted the Danish S.V. Ebenezer being shelled by U.57 and was just too late to save her.3 U.66 went on and the next day (April 6) at 2.30 p.m., in 59° 32' N., 6° 3' W., eighty miles west of the Orkneys, met the British S.S. Powhatan, an oiler of 6,117 tons on the way from Norfolk to Kirkwall and sent a torpedo into her followed by another while the ship was being abandoned. There were no patrols

Études et Mouvements, March, p. 80.
 M.04571/17 in L.598/1917.

³ S.S. *Holgate*, on March 27, towed by H.M.S. *Poppy*, sank 10 miles off Skelligs; the *Laburnum* tried to tow S.S. *Siberia*, April 5; H.S. 650/150, 156.

¹ M.64276/17.

² Not identified.

³ M.64940/17 in X.3183/17. See U.57; S. 227.

in sight; the 4.7-inch gun had nothing to fire at; a wireless message was said to have been sent but no S.O.S. call was received by any station in the vicinity. The master was taken prisoner and the boats were told that Cape Wrath was 60 miles to the S.E. One boat was picked up by a fishing trawler in the North Minch. The other two, with thirty-six of the crew out of fifty-six, were never seen again.

U.66 made for the Norwegian coast submerging on April 7, for a submarine, and arrived back on April 11, after sinking on her Irish trip 14,911 tons, which she gave as 16,000.

226. "U.59," Ireland S.W., March 18-April 11.—U.59 left on March 18, sinking on the 21st off Fair Island in 59° 36′ N., 1° 29′ E., the Norwegian S.S. Najade, 1,752 tons, which was apparently lost with all hands. On board was an armed guard from the Ebro, who were never heard of again.²

She evidently had instructions to reconnoitre the North Channel, for she was off Inishtrahull (Ireland, North) on March 24. She then made for the Lizard to Ushant route, where she found no traffic and was troubled by the heavy ground swell off the coast.³

A heavy gale was blowing from March 29 to April 3. On March 31 she was off Plymouth and torpedoed the British S.S. Valacia, which managed to reach the Sound (see S 240). She proceeded towards the Bristol Channel, and on April 2, at 8 a.m., met the Norwegian S.V. Snespurven, 1,432 tons, New York to Dublin, with 2,100 tons of petroleum. She was sunk by gunfire and the crew after lying to in the boats made to the eastward and were picked up by a Ramsgate trawler on April 4. U.59 may have cruised off the Scillies for a day, but on April 4 was back off the Fastnet, and at 11 p.m., in 51° 20′ N., 10° 52′ W., torpedoed the Norwegian S.S. Hundvaago, 1,901 tons, with a cargo of nuts from Dakar to Liverpool. The torpedo blew off the propeller and damaged the stern, but the ship remained afloat and at 7.45 a.m. (April 5) was picked up by the sloop Lavender and towed to Berehaven, where she was beached and finally salved.

U.59 was on her way home, when the next day (April 5) at noon, in 52° 20′ N., 11° 30′ W., U.86 met the Belgian S.S. Siberier, 2,971 tons, from Charleston to Calais, and torpedoed her without warning. Two British armed trawlers, the Guillemot and Ben Earn (Galway) were in sight a couple of miles off and U.86, sending another torpedo into her, had to dive, leaving the trawlers to pick

¹ I.D. Collection, Vol. 606; Marine-Archiv, Tatigkeit; Home Waters Ships attacked. I.D. Collection, Vol. 638. up the survivors. The Guillemot proceeded to patrol round about, and at 12.50 p.m., seeing what appeared to be the wake of a periscope on the port beam, went full speed for the track and dropped two depth charges (D* and G). The ship remained afloat and was taken in tow by the Laburnum at 5 p.m., but sank the next morning at 11.30 a.m.

On April 6, U.59 sank two small French fishing vessels, Amiral L'Hermite and Roland, and got back to Heligoland on April 11. She had had a poor trip and her next was worse, for she struck a mine off Horns Riff and sank.

227. "U.57," March 20-April 9 (Ireland).—U.57 left Heligoland on March 20 and on March 22, probably somewhere near the Orkneys, sank the Norwegian S.V. Sirius, 1,053 tons, which was never heard of again. She was in the Fastnets area five days later, and on March 27, in 51° 43' N., 10° 48' W., 10 miles west of the Skelligs, at 10.45 a.m. met the British S.S. Holgate, 2,604 tons, going from Gibraltar to Barrow, with iron ore. The ship was going S. by E. at eight knots when a torpedo struck her. A single steamer was in sight inshore; the Holgate had no wireless, and the 12-pdr. gun had nothing to fire at. Just as he was taking the master, Captain R. Hughes, prisoner, U.57 sighted the British S S. Ventura de Larrinaga, 4,076 tons, from Galveston to Manchester, some six miles to the eastward and opened fire on her at 12.30 p.m. (March 27). She brought the submarine astern and made an S.O.S. to Crookhaven which brought the sloop Poppy on the scene; U.57 had to go down and the Ventura de Larringa got away. The Holgate was still affoat, and the Poppy made an attempt to tow her, but the tow rope parted and she sank before reaching port. The crew of twenty-six were all landed safely at Valentia the next day.3

U.57 apparently made for Bantry for she reported breaking her port propeller there. Then she proceeded to the south coast of Ireland, and at 4.5 p.m. on March 28 heralded her arrival by firing two torpedoes at the British S.S. Kurdistan (3,720 tons, Admiralty charter, Blyth to Alexandria) off Old Kinsale Head; both torpedoes missed, one passing under the ship and the other astern. U.57 moved a few miles to the eastward, and at 5.15 p.m. (March 28) in 51° 31′ N., 8° 18′ W., some fifteen miles from Queenstown she sent a torpedo into the British S.S. Gafsa, 3,974 tons, Admiralty transport, an oiler from Texas to Queenstown, for orders. The sloop Zinnia, which was escorting her and zigzagging on her port bow, turned and dropped two depth charges, which both exploded with a terrific report, shaking the submarine from stem to stern.

² Mid. John Barber, R.N.R. and three men; the relatives of a Swede on board heard from Germany that the crew took to the boats and part of the British prize crew were said to have been saved. M.67046/1917 in Foreign Office 25/5/17; L.53224/17 in Misc. Off. 17/10/17.

³ C.B. 01370, p. 32, Report, U.59.

⁴ Salvage claim allowed, £2,750, Gazette 21/1/19.

¹ H.S.533/261, Queenstown, A.P. Reports.

² M.04820/17, Queenstown. The depth charges tore off a large deck plate. See S. 316.

³ M.64845/17.

⁴ No details.

⁵ R. Hughes' account. Also O.X.O.C.B. 01370, p. 31. U.57's Report.

and were regarded inside as unpleasantly close. The ship sent out an S.O.S. but got no reply. Her 12-pdr. gun did not get a chance to fire; seven men lost their lives and the rest were saved by the Zinnia.

U.57 went on to the westward, and the next day (March 29) at 11 a.m., was sighted by the sloop Camellia off Waterford (51° 49' N., 7° 15' W.). At 3 p.m., 52° N., 7° W., eight miles from Hook Point (Waterford) she met the British S.S. Lincolnshire, 3,965 tons. New York to Havre, and torpedoed her. Nothing was seen of the submarine and the ship sank at once. A couple of hours later the British S.S. Crispin came along, 3,965 tons, a horse transport going from Newport News to Avonmouth. At 7.15 p.m. (March 29) she was 14 miles from Hook Point, in 51° 54' N., 6° 49' W., when a torpedo struck her. Her story is the same. The wireless was disabled. The 12-pdr. gun had no target. It was a clear starlight night. The ship had been picked up and escorted as far as Old Kinsale Head (some 60 miles to westward), but she had come on from there alone as there was a scarcity of patrols at the time, and she was actually without escort.2 The crew of 112 got away with the exception of eight men lost, and were picked up by different vessels; the ship remained affoat for some hours but had gone down by the time tugs arrived on the scene.

This was the last ship sunk by U.57 off Ireland, but her cruise was to end dangerously with a "Q" ship action.³

On March 30, Q.25 (Paxton) (Lieutenant-Commander George O. Hewett, one 4-inch, two 12-pdr.) was cruising off the Smalls in 51° 40′ N., 5° 50′ W., steering N. 2 W. at 8.20 a.m., when a torpedo passed astern from port to starboard. He continued on the same course and at 8.33 a.m. a submarine rose on the starboard quarter in the rays of the sun and opened fire.

Q.25 went to "panic" stations. This was her first action and it was not very fortunate. When lowering the boat, the fore guy parted and six men were lost. The range was 2,000 yards at 8.42 a.m., and Q.25 opened fire with the after 4-inch and port 12-pdr. which fired eight rounds.

The starboard 12-pdr. broke its lock against the gun-house on recoil after the first round. The submarine went down about 8.45 a.m., but rose again about 8.52, and the after gun and starboard 12-pdr. opened fire at 3,500 yards, and it was thought obtained a hit abaft the conning tower just as the submarine finally disappeared.

The Captain and two officers of Q.25 received a mention. U.57 was unhurt. She was seen off Helvick Head (Dungarvan Bay) at 10.45 a.m., on March 31, and Q.6 sent out to look for her, sighted her right ahead in 51° 51' N., 7° 15' W., at 5.55 p.m. The submarine dived, and at 6.50 p.m. fired a torpedo which passed under the ship.2 On April 5, at 10.0 a.m., she was off St. Kilda, in 58° N., 8° 35' W., when she met the Danish S.V. Ebenezer, 181 tons, Savannah to Aalborg, with oil cake. This small sailing ship had been stopped on April 2 at 1.45 a.m., by the French Auxiliary Cruiser Artois, which worked with the Tenth C.S., and had been ordered to go to Stornoway. A heavy N.N.E. gale was blowing on April 5, when U.57 stopped her, and after the crew and armed guard had scrambled into the boat, set her on fire. About noon, the armed trawler Rushcoe Castle (Lieutenant J. T. Randell, D.S.C., R.N.R.), which had been engaging U.66 to the northward, came up, and U.57 coming under her fire3 was driven down. She went on her way, however, and reached Heligoland safely on April 9, having sunk four S.S. and two S.V., totalling 15,742 tons, and having been once seriously attacked by the Zinnia. Mr. Hughes, the Master of the Holgate, who gave an interesting account of his voyage later, was sent on to the Brandenberg Camp and then on to Holzmenden, a camp for British Officers.

CHAPTER XII.

MARCH 1917. (Plans 28, 29.) SUBMARINES, FLANDERS, AND STATISTICS.

228. "U.C.47," March 6-19.—Of Flanders submarines, there operated in the Channel, Bay, and Irish Sea, some fourteen during the month of March. U.C.47 left Zeebrugge on March 6 to operate in the Bristol Channel. She laid mines on March 7 off the Royal Sovereign (8), off Newhaven (5), and off the Owers (5); on the latter field the Norwegian S.S. O. A. Knudsen, 3,531 tons, on her way from London to Port Talbot, struck on March 22 at 11.55 p.m., but managed to keep afloat and was towed into Southampton by a tug. U.C.47 was in Lyme Bay on March 11, and at 0.25 a.m., in 50° 25′ N., 2° 58′ W., met the British S.S. Tandil, 2,896 tons, going from Barry to Portland; the ship was not armed and had no wireless; she was torpedoed

¹ M.64352/17; no details.

² There were, however, four patrol vessels within 30 miles of her—H.M.S. Jessamine, and the A.T.'s Indian Empire, Maximus and Rodney. H.S. 650/142.

³ U.57 mentions it in C.B. 01370/1917, p, 31; U.C.65 was not far off to the northward.

¹ H.S. 648/130, 139.

² H.S. 648/123.

³ M.04940/17 in X.3183/17. Mr. Hughes in U.57 heard the explosions. ⁴ Field 322, 322a, 322b in O.U. 6020B. Off Newhaven one was found on March 10 and two on March 22; one was found off the Owers on March 17. Q. 882, March 17, 2045.

without warning and sank in twenty minutes. The crew of 27, four of whom were killed by the explosion, were picked up by the trawler Coronet.

U.C.47 went on to the Cornish coast, and at 11 p.m. that night (March 11), in 50° 17' N., 5° 35' W., met the French S.S. Charles Le Cour, 2,382 tons, from Cardiff to St. Nazaire, and sent a torpedo into her. She was armed with a 90-mm, gun but could see no target. Two of H.M. drifters (net) were near by, and when the drifter I.S. (one 3-pdr. gun) came up the submarine went down, after sending another torpedo into the ship, which sent her to the bottom. The next day, March 12, she made a severe attack on a fishing fleet off Trevose Head, and between 10 a.m. and 2 p.m., sank ten1 of them with bombs. She then made for the Tuskar (Ireland, S.E.), and on March 14, at 1.30 a.m., in 51° 55' N., 6° 24' W., met the British S.S. Brika, 4,139 tons, Cuba to Queenstown, and torpedoed her. The ship's 15-pdr. gun had no target and her wireless was shattered by the explosion. She sank in an hour; the crew of 33 were picked up by the Norwegian S.S. Stavn at dawn. She was some 10 miles from the coast (Barrels L.V.) and it was considered that the master was not following the instructions given him to steer a coastal course consistent with safe navigation.2

U.C.47 then made for Ushant, and on March 15 at 3.30 p.m., 14 miles to northward Ushant, in 48° 45' N., 5° 8' W., met the Norwegian S.S. Solferino, 1,155 tons, going from Lisbon to Stavanger, and after stopping her, sank her by torpedo as the bombs failed to explode. U.C.47 lurked about in the area, and that evening (March 15), at 6.30 p.m., some 10 miles to the eastward (48° 40' N., 4° 48' W.), stopped another Norwegian steamship, the Wilfred, 1,121 tons, from Newport, with 1,325 tons of coal for Gibraltar, and sank her. She hung about off Ushant, and the next day (March 16), sank two ships with bombs, in 48° 33' N., 5° 28' W., at 7.15 a.m. the Italian S.S. Medusa, 1,274 tons, Spain to Hartlepool, with ore, and in 48°23' N., 5°30' W., at noon, the French S.V. Sully, 2,648 tons, from Bahia Blanca to Brest, with grain. That evening, a little to the northward, in 48° 50' N., 4° 56' W., at 9.30 p.m., she sighted a convoy3 and fired a torpedo at the French S.S. Renée Marthe, Lorient to Glasgow, which missed astern. This completed her offensive effort and she was back at Zeebrugge on March 19. She had been out 13 days, sank seven ships of 15,819 tons and ten fishing vessels. She had not been seriously attacked.

229. "U.C.21," March 6-20.—U.C.21 left Zeebrugge on March 6, the same day as U.C.47, to operate in the Bay. She must have

3 Probably French Coal Trade.

hung about the Channel for a day or two for on March 10 she was only off Ushant where at 7.10 a.m., in 48° 38' N., 5° 17' W., she met the Norwegian S.S. Asbjorn, 3,459 tons, with 3,253 tons of coal, from Barry to Lisbon, and sank her with a torpedo. She seems to have been in convoy for the patrol vessel L'Ocean came to her help at once and the gunboat Ardent was on the scene soon after. U.C.21 then proceeded to the Loire and on March 11 laid six mines there, in 47° 10′ N., 2° 22′ W., which were found on the 13th. She went on to the Gironde where, on March 12, she dropped her twelve remaining mines.2 They were found in the morning of the 13th and were swept up by the 25th, apparently without sinking anything. Going north, she sank that forenoon (March 12) two French fishing vessels, the Alice Charles and Aréthuse, off D'Oleron, and off the same island the next day (March 13), at 11 a.m., met in 45° 58' N., 1° 42' W., the Spanish S.S. Vivina, 3,500 tons, from Newport to the Azores, with coal, and as there were two patrol vessels in sight busy minesweeping, sent a torpedo into her. She then took up her return journey and at 5 p.m. (March 13), in 46° 15' N., 1° 43' W., met the Norwegian S.S. Girda, 1,824 tons, on the way from Glasgow to Rochelle, which had missed the convoy at Brest and had been escorted south for three hours by two patrol boats; these had, however, left her and she was stopped and sunk with bombs.

The next day, March 14, still on her way north, along the coast, U.C.21, at 10 a.m., in 47° N., 2° 26' W., off the Loire, met the Norwegian S.S. Blaamanden, 954 tons, going from Huelva to Nantes with iron pyrites. She had come from the south with a convoy of a dozen ships which had been dispersed the night before by bad weather, and being alone was stopped and sunk by gunfire. Three hours later at 1.45 p.m., in 47° 11' N., 2° 48' W., the same fate befell the French S.V. Marne, 133 tons, which had come across Channel in convoy and was making her way from Cardiff to Rochelle with 200 tons of coal. U.C.21 hung about off the Loire the next day (March 15) sinking in about 47° 5' N., 3° 4' W., three small French fishing vessels, Fleur d'Esperance, Eugene Robert and Petit Jean in the afternoon, and at 9.10 p.m. in 47° 3' N., 2° 46' W., meeting a convoy of ten ships escorted by armed trawlers, sent a torpedo into the British S.S. Frimaire, 1,119 tons, going from Glasgow to St. Nazaire, and sank her.

Still going north, she was off Lorient on March 16 and at 6.20 a.m., in 47° 37′ N., 3° 51′ W., stopped the Norwegian S.S. Ronald, 3,021 tons, going from Cardiff to Citta Vecchia (Italy) with 4,500 tons of coal and sank her with gunfire. Off Penmarch (Brittany) at 3 p.m. she stopped three³ small French sailing vessels, the St. Michel on

¹ Proverb, Revina, Jessamine, Gracia, Lent Lily, Hyacinth, C.A.S., Inter-nos, Nellie, and Ena.

² Between Coningbeg L.V. and Barrels (Ireland, South). He might have been four miles further inshore with safety.

¹ Field 318 in O.U. 6020B.

² Field 318a, 318b in about 45° 40′ N. 1° 18′ W.

³ Études et Mouvements, March, 1917, page 54, mentions as sunk two others, the *Anais*, 98 tons, and *Jeanne d'Arc*, fishing vessel. Not in "Foreign Vessels Sunk."

the way to Swansea, the Raymond on the way to Fowey, and the Magdeleine Davoust, with 213 tons of coal for Sables d'Olonne. They were stopped and had been abandoned when a torpedo boat and sloop came up, drove the submarine down and saved two of them. The Magdeleine Davoust, 148 tons, was already making water and sank before she could reach the shore.

U.C.21 turned up two days later in the Channel, where on March 18, at 8 a.m., in 50° 5′ N., 2° 15′ W. (north of Alderney) she met the U.S.S. Illinois, 5,225 tons, an oiler, going from London to Port Arthur, Texas, in ballast. It was a clear morning, at 7.45 a.m., when the submarine was seen some three miles away. She submerged and came up ten minutes later close to the ship and opened fire. The second shot carried away the wireless; another went into the engine room. The ship was abandoned and sunk by bombs. The crew of 34 pulled to Alderney. This was U.C.21's last ship on that cruise and on March 20 she was safely back in Zeebrugge. She had been out 14 days and sank nine ships, of 19,383 tons and five fishing vessels.

230. "U.C.16" and "Laforey," March 10–16.—U.C.16 had an uneventful cruise. She left Zeebrugge on March 10, laid six mines on March 11 off Boulogne, in 50° 44′ N., 1° 31′ E., six off Dieppe the next day, and on March 13th six off Cap de la Héve (Havre).¹ Though the mines off Boulogne were located on the 12th, one of them, nearly a fortnight later, was struck by the destroyer Laforey on March 23 (see S. 260). U.C.16 probably cruised off the French coast for a day or two, for she was not back in Zeebrugge till March 16.

231. "U.B.18," February 27-March 5, 10-20.—U.B.18 was out twice during the month. She left Zeebrugge on February 27, and the next day at noon, in 49° 55′ N., 0° 20′ E., met the small British S.V. Harriet Williams, 156 tons, from London to Havre, and sank her with bombs. She evidently remained on the Havre route, for on March 1, at 9 p.m., in 50° N., 0° 55′ W., she met a coal trade convoy from St. Helens (Isle of Wight), escorted by four armed trawlers, and sent a torpedo into the British S.S. Chatburn, 1,941 tons, Sunderland to Rouen, with 2,600 tons of coal, sinking her. The patrols opened fire and U.B.18 went down. It was she that two days later had a perilous encounter in the same area with H.M.S. Teviot. On March 3 H.M.S. Teviot (Lieutenant George L. M. Napier) was on her way back from escort duty when at 6.30 a.m., in 50° 10′ N., 0° 43′ W., she sighted what appeared to be a sail, two points before

the port beam 3,000 yards away. It disappeared and he turned towards it. Five minutes later a periscope was seen a point on the port bow, 150 yards off, and the *Teviot*, going full speed, dropped three depth charges (2 G and 1 C), two of which exploded. Nothing more was seen of the submarine, and it is possible that *U.B.*18 was severely shaken, for she was back on March 5. (Plan 30).

She left Zeebrugge again on March 10 to work off the Channel Islands. On March 12, at 1.8 a.m., in 49° 50′ N., 0° 40′ W., she met the British S.S. Topaz, 696 tons, from Honfleur to Port Talbot, and sank her with a torpedo. She went on to the westward and it may have been she that on March 14, at 10.30 a.m., in 50° 14′ N., 3′ W., was sighted by the British S.S. Fallodon, 3,011 tons, going from Boulogne to Barry. The Fallodon was steering west when the submarine was seen on the port bow about 2½ miles off. The ship turned to bring her astern, and the submarine opened fire which the ship returned with her 4.7-inch gun. At the second shot the submarine submerged and the Fallodon went on. It may have been U.B.18, too, that the armed trawler Maristo sighted on the surface later in the day (March 14) at 5.45 p.m., in 50° 3′ N., 3° 35′ W. The armed trawler chased her for an hour when she submerged.

At 10 a.m., on March 15, in 49° 5' N., 4° 5' W., she sank with bombs the French S.V. Adieu-va, 64 tons, from Swansea to Treguier. She then went north, and on March 16, at 8 p.m., in 49° 45' N., 3° 8' W., met and sank with bombs a British S.V. Sir Joseph, 64 tons. going from Guernsey to Plymouth. At 6.45 a.m. the next day, March 17, in 50° 9' N., 1° 59' W., she sank a French S.V., the Marie Louise, 426 tons, from Swansea to Fecamp. At noon, March 17, on the Weymouth-Cherbourg coal route in 50° 7' N., 2° 45' W., she met the French S.V. Marie Louise (of St. Malo), 269 tons, going from Havre to Briton Ferry with tin and sank her with bombs. U.B.18 then made towards Havre, and on March 18, at 1 p.m. in 49° 43' N., 0° 12' W., sank with bombs a third, Marie Louise, a French fishing vessel of 33 tons. It was probably U.C.21 that at 1.15 p.m. in about 50° 21' N., 1° 17' W. attacked the French S.V. St. Hubert, Fecamp to Swansea. The crew were in the boat when a small British net drifter, the S.D.J., came up and, driving the submarine down, saved the ship. It was possibly U.B.18 that the armed trawler Willet, of Newhaven Base, returning from Havre, sighted on March 19, at 8.30 a.m., in 49° 57' N., 0° 20' W., and attacked, releasing a depth charge where she went down with no apparent result.3

¹ Fields 334, 334a, 334b in O.U. 6020B. Positions in German statements are only approximate. Mines were found (Dover) on March 11, 12 in 50° 55′ N. to 51° 3′ N. and 1° 19′ E. to 1° 48′ E.

¹ M.02688/17.

² H.S. 595/174, Portsmouth report (wrong date, March 17); E. 1 Log, A.25/7, A.18/12; H.S. 390/107.

³ H.S. 595/183, Auxiliary Patrol, Portsmouth. U.B.18 did not report it.

Her attack on the Havre route had no further result, and she was back in Zeebrugge by March 20. Sixteen days in the Channel had brought her in only seven small ships with a tonnage of 3,493 tons, five of them sailing vessels. She had been chased by one armed trawler and depth-charged by another.

232. "U.C.66." March 10-23.—U.C.66 started on March 10 for the south coast of Ireland and, on March 11, was engaged by the Bayard off Newhaven (S.221). On March 12, at 3.30 a.m., in 50° 12' N., 1° 11' W., she met the British tug Glynmel, 713 tons, going from Havre to Swansea; there were no patrols in sight and she sank her by gunfire. She turned up next off the Start, where about noon (March 12) she sank a British F.V. Reindeer, and at 12.10 p.m. stopped the Norwegian S.S. Einar Jarl, 1,112 tons, in 50° 12' N., 3° 17' W., and sank her with gunfire and bombs. A little to the eastward, at 4.15 p.m., in 50° 15′ N., 2° 48′ W., she met the British S.S. Memnon, 3,043 tons, going from Rakar to Hull, and sent a torpedo into her. There were no patrols in sight; five men were killed; the boats pulled to the N.E. and were picked up the next morning by T.B.86 (Portland). Three-quarters of an hour later, 5 p.m., she sank the British F.V. Forget-me-Not not far off. U.C.66 then proceeded west, and the next day, March 13, at noon, 20 miles from Lands End, in 49° 47' N., 5° 47' W., sank the F.V. Try, 34 tons, by gunfire. She may have been the submarine2 seen off the Lizard the next morning at 2.40 a.m., March 14, which attacked the French S.S. Hirondelle at 8 a.m. in 49° 49' N., 4° 43' W. The French ship sighted a submarine four miles off, brought her astern, exchanged shots and escaped.

On March 14, she was off the south coast of Ireland and laid mines, six by Daunt Light Vessel (Queenstown), six by the Old Head of Kinsale, and six by Galley Head.³

This field off Galley Head was responsible three days later for the loss of two sloops that were busy sweeping it. On March 17, at 9.30 a.m., 1½ miles S.31 E. of Galley Head, in 51° 31½′ N., 8° 55′ W., H.M.S. Mignonette struck a mine when sweeping and had her forepart blown off and sank. The next day, at 11.54 a.m. (March 18), the Alyssum, sweeping with the Myosotis, a mile or two from the spot, suffered the same fate, and sank at 12.20 p.m. when in tow.

Both of these sloops were fitted with the "Skipjack" gear for catching mines, and as a consequence of their loss it was decided to remove it.4

Meanwhile U.C.66 had gone back, and forty miles from the Fastnets, on March 17, at 3.50 p.m., in 50° 45′ N., 10° 3′ W., met

¹ In about 50° 23′ N., 2° 40′ W. ² Or U.B.18, H.S. 389/410; U.C.66 would barely have time to get to Queenstown (190 miles) and lay her mines the same night.

³ Fields 331, 331a, 331b in O.U. 6020B, German Minefields.

4 M.11105/17 and M.11175/17.

the U.S.S. City of Memphis, 5,252 tons, Cardiff to New York. No patrols were in sight, no signal was sent, and the ship was sunk by gunfire. The crew of fifty-seven got away in the boats and were picked up by various patrol vessels. U.C.66 then returned to the Channel and hung about off Plymouth for three days. On March 19, at noon, she met in 49° 47' N., 4° 55' W., a small French S.V. Armoricain, 268 tons, Treport to Cardiff, and sank her by gunfire. The next day (March 20), at 9.45 p.m., she met in 50° 11′ N., 3° 35′ W., the British S.S. Hazelbark, 1,785 tons, South Shields to La Rochelle, with coal and sank her with a torpedo. The ship had no wireless, and the 12-pdr. gun had no target. She was then some 10 miles off the Start and moved in towards shore. The Asturias, a hospital ship of 12,002 tons, on her way from Avonmouth to Southampton, was approaching the Start. On January 31, the German Government had announced definitely that from that date no hospital ship would be permitted in the area between Flamborough Head and Terschelling and Ushant to Lands End. The night was overcast and dark. The Asturias had her red cross brilliantly illuminated and her band of green lights shining from stem to stern. She was six miles south of the Start, in 50°8' N., and 3°36' W., going 141 knots when a torpedo hit her aft. The starboard propeller was knocked off and the helm was put out of action. The watertight doors between the engineroom and boiler-room was not closed. A number of the crew and military were lost in lowering one of the boats. Two armed trawlers, the Stanley Weyman and Casoria, came up within half an hour and began to pick up survivors. The Eclipse came out to pick up the soldiers. The ship crept in towards shore and was finally beached off Salcombe. The master had received no orders² as to extinguishing his lights within the prohibited zone. This was probably3 the work of U.C.66.

U.C.66 then made for home. Off Portland, on March 21, at 8.30 a.m., she sank with gunfire a British fishing vessel, the Avance, and the next day, March 22, at 5 p.m., off Dungeness, in 50° 48′ N., 0° 50′ E., the Norwegian S.V. Efeu, 569 tons. This was the end of her cruise, and she was back in Zeebrugge on March 23. She had sunk 12,172 tons, torpedoed a hospital ship, and sunk two sloops with her mines.

233. "U.C.70," March 10-22.—U.C.70 left Zeebrugge on March 10 and proceeded to the Bay of Biscay where, on March 14, she laid six mines off the Ile de Groix (Loire) in 47° 41′ N., 3° 32′ W., and on March 15, off Quiberon Bay (47° 13′ N., 2° 48′ W.), and the Ile d'Oleron (46° 5′ N., 1° 24′ W.). The latter field was responsible

¹ Crew, 20 killed, 9 missing; military, 11 killed, 3 missing.

² M.63878/17, Enquiry at Plymouth, March 28, 1917, and M.63756/17.

³ Not mentioned, however, by Marine Archiv. ⁴ Fields 326, 326a, 326b in O.U. 6020B.

for the loss of two ships in the same convoy four days later, March 19. The French S.S. Michel, 1,773 tons, with coal for Bordeaux, at the head of the convoy, struck a mine and went down with the loss of fourteen men; five minutes later the Norwegian S.S. Avra, 2,370 tons, from Cardiff to Blave, with 3,250 tons, struck another and broke in two with the loss of four men. U.C.70 went on and, on March 16, about 3 p.m., off the Gironde, sank a couple of small French sailing vessels, the Martha Yvonne and Corduan, and was engaged by a French patrol vessel, the Marguerite. On March 17, about 40 miles from the river, U.C.70 fell upon a French fishing fleet and sank eight of them by gunfire.1 On March 18, off the Loire, on her way home, she sank three more French fishing vessels2 between 8.30 a.m. and 10.45 a.m. This attack was brought to a stop by a small French "Q" sailing ship, the Hyacinth Yvonne, which, at 11.30 a.m., in about 46° 20' N., 2° 19' W., engaged her with a 1.6-inch gun. The gun was too small, and the "Q" ship was sent to the bottom, but U.C.70 made no further attacks.

She must have been in the Channel on March 21, and arrived at Zeebrugge on March 22 with nothing to her credit but a dozen fishing craft and a couple of small sailing vessels.

233A. "U.C.68," March 10 (See S.365).—U.C.68 sailed on March 10 to lay mines off Dartmouth and Plymouth. Her mines probably laid on March 12–13, damaged the S.S. Orsova and sank H.M.S. Foyle on March 14 (S.253). She was torpedoed by C.7 on April 5.

234. "U.C.48," March 12–25.—U.C.48 left Zeebrugge on March 12. Her course through the Channel is obscure. On March 16 she laid six mines off Waterford, and on March 17 six off the Coningbeg Light Vessel in 52° 2′ N., 6° 40′ W., and six off the Barrels Light Vessel (S.E. of Ireland) in 52° 6′ N., 6° 24′ W.³ The strong and variable tides made sweeping difficult off the south coast. The Barrels Light Vessel field was discovered on March 22,4 when the British S.S. Providence, 2,970 tons, was blown up, and was followed by the armed trawler, Evangel, on March 25.

The Coningbeg field was discovered on March 25,5 though three weeks later, on April 14, the S.S. *Hermione*, 4,011 tons, struck another mine there, laid by *U.C.*33 the day before. She was towed by the *Daffodil* into Dunmore, where her cargo was salved.6 On March 16, at 4.10 p.m., *U.C.*48 was lying on the coast some 20 miles east of Queenstown, stopped the small British S.V. *William Martin*.

82 tons, and sank her with bombs. Moving west the next day (March 17), at 6 a.m., she met the British S.S. oiler Laurel Leaf. 5,631 tons, in 52° 4' N., 6° 24' W., and fired a torpedo which missed ahead. The ship was armed with a 4.7-inch gun, and two destroyers or torpedo craft were in sight, one on the starboard quarter and another on the bow about one mile off. At 9 a.m., U.C.48 sank by gunfire the British fishing vessel Guard, 280 tons, in 51° 53' N., 6°52′ W., and, going west again, at 2.50 p.m. (March 17), in 51°56′ N., 7° 9' W., met the British S.S. Antony, 6,446 tons, from Lisbon to Liverpool, going 14 knots and zigzagging. There was only a schooner in sight when U.C.48 sent a torpedo² into her, and then a second to make certain of her. The Antony's 6-inch gun had no opportunity to fire, and the wireless she sent gave her position as off the Fastnet instead of off the Coningbeg. Of sixty-four Lascars on consular passage, fifty-two, and five Portuguese were drowned. The crew of 126 and four passengers, after three hours in the boats, were saved. On March 21 U.C.48 was off Plymouth, and at 10 a.m., in 50° 4' N., 4° 13' W., met the British S.S. Rio Sorocaba, 4,307 tons, from Mauritius to Havre, with 6,400 tons of sugar, stopped her by gunfire and sank her with bombs.3 She probably hung about in the vicinity, for the next day, March 22, she met in 50° 17' N., 3° 7' W., between the Start and Portland the British S.S. Rotorua, a large ship of 11,140 tons, from New Zealand to London, which had called at Plymouth and left at noon unescorted. It was 6 p.m., and she was going 13 knots, when U.C.48 fired a torpedo, which struck her on the starboard side aft: two patrol vessels, the Ocean and Monarch, came up within half-an-hour and were able to take off the whole crew of 148 and 238 passengers; only one man, a steward, was killed. A considerable correspondence developed with the Colonial Office on the question of her despatch unescorted from Plymouth. 4 On March 23, U.C.48 sank the Dutch S.S. J. B. August Kessler off Portland (see S.237) and reached Zeebrugge on March 25. She had sunk 27,606 tons and two vessels had been lost on her mines.

235. "U.C.36," March 15–28.—U.C.36 left Zeebrugge on March 15 to lay mines off Brest. On March 17 she was in her area, and at noon in 48° 54′ N., 5° 7′ W., met the Danish S.S. Russia, 1,717 tons, with 1,500 tons of coal from Newcastle to Monte Video, and torpedoed her. The survivors were picked up by H.M.S. Orestes and taken to Brest. The next day (18th) she laid eleven mines in 48° 27′ N., 4° 50′ W., in the Chenal du Four, between Ushant and the mainland, and on March 19 dropped her remaining seven off Brest in 48° 17′ N., 4° 48′ W. She then, apparently, hung about

¹ Roundabout 46° N., 2° 28' W., between 11 a.m. and 3 p.m.

² Felicite, Madonne, Entente Cordiale. ³ Fields 325, 325a, 325b, in O.U. 6020B.

H.S. 392/207; X.2990/1917.

⁵ H.S.B. 170/495.

⁶ Queenstown Report H.S. 650/172.

¹ M.63782/17 in X.2218/17.

³ A periscope was seen and the submarine went alongside a boat later (M.6327/17).

³ M.63850/17.

⁴ M.65903/17; Enquiry, Rotorua (see S. 259).

for a week to the southward of Brest. On March 19, at 10 a.m., she met in 47° 47' N., 4° 44' W., the Norwegian S.S. Brode, 2,362 tons, from Cardiff to Gibraltar, and sent a torpedo into her. The ship foundered almost at once, but only one man was lost. Shortly afterwards she sank with gun-fire and bombs another Norwegian S.S. Kong Inge, 867 tons, going from Glasgow to Marseilles. Three days elapsed before she met, on March 22, at 7.20 a.m., in 47° 53' N., 5° W., the Norwegian S.S. Hugin, 1,395 tons, with 200 tons of coal, from Sunderland to Santander, and sank her with gunfire. The French had started convoying the traffic by this time, and another three days elapsed before she found another victim on March 25, at 8 a.m., in 47° 31' N., 3° 28' W., in the French S.V. Leontine, 201 tons. She had been in a convoy going from Las Pallice to Swansea, but had lost it and made for Belle Ile. She was stopped and sunk by gunfire, with six men killed and three wounded. Only three men were picked up by the boats of the British S.S. Baynaen.

The Baynaen, 3,327 tons, going from Dakar to Nantes, had barely picked them up when, at 10.45 a.m., in 47° 30′ N., 3° 41′ W., she was herself torpedoed. It was hazy weather; no patrols were in sight, and the 12 pdr. gun had nothing to fire at. The ship sank in five minutes with a loss of four British and one American, out of 32. The remainder took to the boats and reached Lorient. Not far off was a small French fishing vessel Etoile Polaire, 51 tons; she saw the Leontine and Baynaen sunk and was herself sunk at 1 p.m.

U.C.36 apparently left the area that day and was back at Zeebrugge on March 28, having sunk 9,869 tons.

236. "U.B.40," March 17-31.—U.B.40 left Zeebrugge on March 17 on a cruise which is not clearly established. It was not till March 25 that she was reported on the Normandy coast where, at 7.30 p.m., she caught five French fishing vessels and sank them with gunfire. Four days elapsed before she caught a ship off C. Barfleur, on March 29, the British S.V. Conoid, 165 tons, from Fowey to Rouen, which she met at 8 p.m., in 49° 45′ N., 1° 11′ W., and sank by gunfire. She sank only one ship of any size, the British S.S. Somme, 2,600 tons, from Newport to Rouen, which she met at 1 a.m. on March 30, in 49° 48′ N., 0° 41′ W., and sank her with two torpedoes. The ship had no wireless, but opened fire with a 6 pdr. gun. After an apparently uneventful cruise she was back in Zeebrugge the next day (March 31).

237. "U.C.17," March 18-26.—U.C.17 started on March 18, and at 6.30 a.m. on March 19 sank a French fishing vessel, the Rhodora,

18 tons, off Boulogne. That night she laid six mines off Beachy Head in 50° 42′ N., 0° 17′ E.,¹ and six off Newhaven in 50° 44′ N., 0° 7′ E.² On March 21 she laid the remaining six off the Nab, in 50° 39′ N., 0° 56′ W.³ A mine was found off Beachy Head on March 21, and four more up to March 23, when the S.S. Mexico ran on a mine and was damaged. The Newhaven field was found on March 22, and the Nab field by the Sandfly the same day, when five were swept up.

U.C.17 went on towards the Start, cruising, apparently, along the coast, and at noon on March 224, in Lyme Bay, in 50° 17' N., 3° 5' W., sank a British F.V. Curlew, 51 tons. That evening, at 7.50 p.m., a few miles to the south-east, she met in 50° 14' N., 3° 2' W., the British S.S. Chorley, 3,828 tons, going from Norfolk, Virginia, to Havre, and torpedoed her. The crew of 27 were picked up and landed at Weymouth. She hung about off the Start, and the next day, March 23, at 8.5 a.m., in 50° 10' N., 3° 22' W., met the British S.S. Maine, 3,615 tons, from London to Philadelphia, and sent a torpedo into her; the sea was very rough; no patrols were in sight: the ship sent out an S.O.S., and crew of the 4.7 inch gun waited for something to fire at. The ship remained afloat some time, and a manful attempt was made by patrol vessels to tow her in, but she sank two miles off Bolt Tail (near Plymouth). Some 20 miles to the north, in 50° 25' N., 3° 10' W,5 about 9 a.m., the Dutch tanker S.S. I. B. August Kessler, 5,104 tons, from Rouen to Cardiff, was torpedoed by U.C.48. Six of the crew were killed, her wireless was destroyed and she was left blazing, but she did not sink and was towed successfully into Plymouth.6 The next day, March 24, at 11.20 a.m., in 50° 10' N., 3° 45' W., within five miles of Prawle Point, she met the British S.S. Ionian, 8,267 tons, from London to St. Johns, N.B., and fired a torpedo at her which missed 20 yards astern. That afternoon she had a field day with a fishing fleet some fifteen miles south of the Eddystone, in about 49° 55' N., 4° 18' W. It was a calm, sunny afternoon, and she sank with bombs, nine of them,7 295 tons in all. Their boats were picked up by H.M.S. Spitfire and Q.12.

¹ Marine-Archiv report gives her the French s.v. *Irma*, 25 tons, on March 29, off the Gironde at 8 a.m. This cannot be correct for she could not have reached C. Barfleur by 8 p.m. (see p. 241, *U.C.*69 for *Irma*).

¹ These are the German positions. The sweeping reports show them much scattered. See Daily Mine Log 1917–1918.

Field 329 in O.U.6020B.
 Field 329b in O.U.6020B.

⁴ There was a report of a submarine having been fired at at 9.30 a.m., March 22, in 50° 25′ N., 3° 20′ W., by a trawler, *Brown Mouse*, H.S. 391/343. This is in E.1 Section's Log and Chart, but no vessel of that name can be traced.

⁵ E.1 log A (Channel) 24/13 gives 50° 16' N., 2° 43' W.

⁶ If position and time of *Maine* and *J. B. August Kessler* are correct, *U.C.17* could not have torpedeed both.

⁷ Reindeer, H.C.G., Mayflower, Qui Vive, Enigma, Endeavour, Boy Walter, Alice. Satanita.

This finished U.C.17's cruise, and she was back in Zeebrugge on March 26 after sinking some 7,789 tons, and missing a ship of good size.

238. "U.C.65," in the Irish Sea, March 18—April 1.—On March 18 Lieut.-Commander Steinbrinck left Zeebrugge in U.C.65 to perform another of his striking cruises in the Irish Sea. On March 22 Liverpool received a batch of six mines, the first ever laid in the Mersey.¹ On March 24, early in the morning, he laid a second batch of three and then started a campaign in the Irish Sea. It was fine, sunny weather, with a smooth sea, and that day, between Carnavon Bay and Ireland, she sank by gunfire and bombs, five small ships—at 8.45 a.m., the French S.V. Bruyère, 100 tons; at 9.15 a.m., the British S.S. Fairearn, 591 tons, from Liverpool to Cork; at 4.20 p.m., the Norwegian S.S. Korsnaes, 732 tons; at 6.20 p.m., the British S.S. Ennistown, 689 tons, from Dublin to Cardiff; and at 10 p.m., the British S.V. Howe, 130 tons, going from Garston to Cork with coal.

The next day (March 25) she was hard at work again. At 1 a.m. she stopped and sank with bombs, the French S.V. Fringante, 124 tons. with coal from Troon (Scotland) to Treguier. Two fair-sized ships then fell to her. It was misty and still dark when in 52° 56' N. 5° 37' W., she met the British S.S. Adenwen, 3,798 tons, going from Cuba to Liverpool with 6,122 tons of sugar. She was steaming. with dimmed lights, when at 4.20 a.m., U.C.65 sent a torpedo into her. Her wireless came crashing down; her 12 pdr. gun was never fired; and in five minutes she had sunk beneath the waves. Of her crew of 33, six were missing and four Arabs died on the rafts before they were picked up. The armed yacht Kethailes (Milford) heard the gunfire and steaming towards it picked up the boats, but saw nothing of the submarine.² U.C.65 then made a cast to the southward and at 8 a.m. (March 25), in 52° 27' N., 5° 12' W., met the Greek S.S. Poseidon, 2,589 tons, from Falaise to Barrow, and sank her with bombs. The armed yacht Hecate (1 6-pdr.) from Milford. was five miles to the southward and sighted the submarine, but was too far off to help, though she "hunted" it unsuccessfully for about an hour.3 U.C.65 had meanwhile gone to the northeast and was chasing the Spanish S.S. Ogono; later in the day she sank the British S.V. Brandon, 130 tons, going from Port Madoc to Waterford, with slates. The time is not known, for all hands were lost and she never was heard of again. U.C.65 then proceeded north, and in the night of March 27 laid mines again off Liverpool, which were barely laid before the British S.S. Kelvinhead. 3,063 tons, struck one (on March 28, at 12.39 a.m.) and sank. On March 28, U.C.65 was at work again in the Irish Sea, off the

Arklow L.V. At 8.30 a.m., in 52° 36′ N., 5° 34′ W., she met the British S.S. Snowdon Range, 2,999 tons, Philadelphia to Liverpool, steaming to the north east at 11 knots, and sent a torpedo into her. After sending out an S.O.S., the ship sank in three-quarters of an hour. Four of the crew of 43 were lost.

U.C.65 went off to the north and at 10.50 a.m., in 52° 58' N., 5° 27' W., met the small Russian S.V. Laima, 125 tons, and sank her by gunfire. She then came back to the south-west, and that afternoon close to the Arklow L.V., sank five more ships, viz., at 12.30 p.m., in 52° 41' N., 5° 51' W., with gunfire and bombs, the British S.S. Ardglass, 777 tons, from Port Talbot to Belfast, with iron; at 2.45 p.m., near Arklow L.V. the British S.V. Harvest Home, 103 tons; at 3.45 p.m., close to the same spot, the Norwegian S.S. Dagali, 742 tons, Hencubon to Glasgow; all this was under the nose of the South Arklow L.V. (52° 42' N., 5° 55' W.), which finally sent out a warning1 to a passing ship, the S.S. Annan, and was sunk for doing so about 5 p.m. In sight at this time was the British S.S. Wychwood, an Admiralty collier transport, 1,984 tons, going from Barry to Scapa. In 52° 40′ N., 5° 55′ W., at 5.58 p.m., U.C.65 sent a torpedo into her, and she sank almost at once. It was nearly time to return, and on March 30 U.C.65 was on her way home. She was sighted by the A.T. Kilmany at 11.10 a.m., but submerged before fire could be opened.2 She was back in Zeebrugge by April 1, having sunk 15 ships (nine S.S. and six S.V.) of 15,613 tons, and laid mines off Liverpool which sank the S.S. Kelvinhead, 3,063 tons.3 Two other ships struck them, the British S.S. Lapland, 18,565 tons (April 7) and the U.S.S. New York, 10,798 tons (April 9), but both were fortunate enough to get in.

239. "U.B.39," March 21—April 16.—U.B.39 sailed on March 21 to operate in the East of the Channel, and probably came along the British coast. On March 23, at 2 a.m., in 50° 41′ N., 0° 1′ W., off Dungeness, she met the British S.S. Clan MacMillan, 4,525 tons, going from London to Glasgow, and torpedoed her. She sent another torpedo into her, and she sank about 6 a.m. The survivors were picked up by the Newhaven armed trawler White Ear. U.B.39 evidently remained cruising on the Newhaven-Dieppe route, for at 1.30 p.m. (March 23) she met in 50° 24′ N., 0° 51′ E., the British S.S. Achille Adam, 460 tons, Valery-sur-Somme to Newhaven, and sank her with gunfire and bombs. Out of a crew of 17, two were killed and seven wounded, of whom four died in the boat, the eleven wretched survivors being picked up the next day by H.M.S. Alarm. A few miles off, in the same area, at 2.30. pm., March 23, U.B.39 met the British S.S. Exchange, 279 tons, and sank her even

¹ O.U. 6020B, Field 337.

² H.S. 676/318.

³ H.S. 676/318; E.1 log, 26/5, 29/11.

^{1&}quot; Hoisted signal B under ball and fired five rockets." N.I.D. 11732/17.

² H.S. 676/308.

³ March 28, 12.39 a.m., 270 yards S.64 W. of Q.2 buoy, Queen's Channel.

more callously, with the loss of every man of her crew of eight. It was not she but U.B.32 that encountered 0.7, the Penshurst, on March 30, in the Portsmouth area. Acting on reports of enemy submarines off Newhaven and Cape Barfleur on the night of March 29-30, 0.7 shaped course N. 82 E. from the Casquets at 5 a.m., on March 30. The day was sunny with a strong breeze and westerly swell. At 4 p.m., in 50° 28' N., 0° 12' W., she sighted a periscope 200 yards away on the starboard beam. It appeared again at 4.20. The submarine was evidently waiting to torpedo her. Q.7 brought her astern, and at 4.36 p.m., the enemy emerged and opened fire. The ship stopped, and was twice badly hit as the submarine came up. At 4.42 p.m., Q.7 opened fire and got off 29 rounds before the submarine went down, having apparently been hit at least twice.2 U.B.32 was not seriously damaged, for on March 31, at 8.45 p.m., off Cape Barfleur, in 49° 48' N., 1° 15' W., she torpedoed the British S.S. Queen Louise, 4,879 tons, going from Cherbourg to Havre in convoy. The crew, who had abandoned ship, was persuaded to return, and she was got safely into Havre. U.B.39 appeared again on April 1, when at 11.30 a.m., off the Owers, in 50° 17' N., 0° 18' W., she met the British S.V. Silvia, 164 tons, and sank her with bombs.

She then apparently went off to the Bay, for on April 5 at 7 a.m., off Brest, she met the Norwegian S.S. Dicto, 2,363 tons, from Aguilar to Maryport, with 3,560 tons of ore. The Dicto had left Belle Ile with a convoy of 28 ships, escorted by four French patrol vessels, and saw a torpedo miss the Danish S.S. Varing in the rear of the convoy. Then she herself fell behind and was stopped and torpedoed. U.B.39 then went off towards the Scillies, and at 1.30 p.m., the next day (April 6) sank a small French S.V. Perce Neige, 141 tons, off the Wolf.

At 4.15 p.m., in 49° 45′ N., 5° 35′ W., off the Longships, she stopped another French S.V. La Tour d'Auvergne, 188 tons, from Camaret to Cardiff with pitprops, and set her on fire. The destroyer Porpoise (Devonport) then came on the scene and drove her down. On April 9 she appeared again in the Channel East, and at 6.30 p.m., in 49° 56′ N., 0° 16′ E., stopped the French S.V. St. Mandex, 299 tons, St. Malo to Treport, and sank her with gunfire. On April 10 she was back in Zeebrugge after a cruise of twenty days, in which she had sunk eight ships of 8,419 tons.

240. "U.C.72," March 22-April 3.—Of U.C.72 there is little to record. On March 11 she laid nine mines off Portland, which were found on March 22, and on March 13, nine off the Needles (found on March 13).³ This must have been a short cruise, for she started again

about March 21, and laid nine mines off Dungeness¹ on March 21, and nine off the Royal Sovereign Light Vessel² on March 24, which were found towards the end of the month and without any losses. Though in that area it was apparently not she that was fired at by the A. T. Rinto off the Isle of Wight on March 27 at 8.30 a.m., nor was it she but U.59 that on March 31 at 5.30 p.m., in 50° 5′ N., 4° 16′ W., five miles S. 19 E. from the Eddystone, torpedoed the S.S. Valacia, 6,526 tons, going from London to Portland, Maine. The ship remained afloat and with the help of the officers and engineers, who remained on board, two dockyard tugs were able to get her into Plymouth Sound.³

It may have been *U.C.72* (or possibly *U.C.65* on her way home from the Irish Sea) that later in the same day, March 31, at 10.50 p.m. off the Channel Islands, met the S.S. *Sofie*, 354 tons, on the way from St. Malo to Penarth, and opened fire on her. The ship altered course to S.S.E. and got away.

She was between the Isle of Wight and Cherbourg on April 1, for at 10 a.m., in 50° 9′ N., 1° 42′ W., she met the British S.V. Eastern Belle, 160 tons, in a squall of snow and a heavy sea, and sank her with bombs and gunfire. By April 3 she was back in Zeebrugge. U.C.61 was also out from March 17 to April 22. (See Appendix K.2).

241. "U.C.69," March 24-April 6.—U.C.69 left Zeebrugge on March 24 for the Bay. On March 25, at 5.45 a.m., she was off Beachy Head, and sank with gunfire and bombs a couple of small British sailing vessels-the S.V. Huntleys, 186 tons, Bristol to Dieppe, with pitch, and the Marie Annie, 154 tons, going from Glasgow to Treport with coal. The next day, March 26, off the coast of Brittany, in 48° 53' N., 4° 31' W., at 10.30 a.m., she met the Swedish S.S. Norma, 1,443 tons, from Dakar to Dunkirk with groundnuts, and set her on fire in a heavy sea. Rounding Ushant. she met and sank on March 27, at 8 a.m., in 47° 57' N., 5° 9' W., the Norwegian S.S. Grib, 1,474 tons, on the way from Lisbon to Hull with vegetables. Half an hour later she caught another Norwegian ship, the Aasta, 4 1,146 tons, on the way from Guadiana to Swansea with 680 tons of copper filings (copeaux de cuivre). The Aasta had been told to wait for a convoy at St. Jean de Luz, but preferring to come on by herself, paid the penalty of her wilfulness. U.C.69 found another victim that evening (March 27) at 8.50 p.m., in 47° 32′ N., 3° 19′ W., off Belle Ile—the British S.S. Thracia, 2,891 tons, on the way from Bilbao to Ardrossan. The ship, armed with

Marine-Archiv, H.S./Q.28.
 M.04286/17 in H.S. 648/157.

³ Marine-Archiv, Minentätigkeit (1918), but not in Tätigkeit (Exchange); Field 321, 321a in O.U. 6020B.

¹ Field 355, 50° 44′ N., 1° 2′ E., Laforey possibly struck one, March 23, or possibly U.C.16's.

² Field 335a in O.U. 6020B, 50° 42' N., 0° 38' E.

³ M.64410/17.

⁴ Etudes et Mouvements, March, page 79, 1 D., Vol. 726; not mentioned in Foreign Vessels, Sunk or Damaged (Trade Division) 1919.

a 12-pdr., was in convoy when U.C.69 sent a torpedo into her. She sank at once, but seven men, of whom four were injured and only one survived, got away in a broken boat. One other survivor, Henry Moss, a private, R.M.L.I., on watch at the gun, was picked up by a Norwegian steamer, the Nordbog, and landed at Barry.1 That night (March 27) U.C.69 laid twelve mines off Belle Ile, in 47° 30' N., 3° 15' W., and proceeding south the next morning (March 28) at 8.30 a.m., in 46° 45' N., 2° 27' W., off the Loire, met the Greek S.S. Katina, 2,464 tons, on the way from Sfax to Nantes, and sank her with bombs. That night (March 28) U.C.69 laid six mines off the Ile d'Yeu in 46° 47' N., 2° 22' W. She went on down the coast, and on March 29, at 8 a.m., in 45° 26' N., 1° 24' W., met the French fishing vessel Irma,2 25 tons. Mistaking her perhaps for the Hyacinth Yvonne, the small "Q" sailing ship sunk by U.C.70 on March 18, U.C.69 opened a savage fire on her at 50 yards, killing a boy and wounding the skipper and smashing up the boat. The submarine then made off, possibly to chase the Morild I, and the Irma got into port. At 11 a.m. (March 29), in 45° 10' N., 1° 10' W., she came up with the Norwegian S.S. Morild I, 1,354 tons, going from Oporto to Cardiff with poteaux de mines, and sank her. U.46 was in the corner of the Bay on March 28, and it may have been she or U.C.69 that on March 29, at 11.45 p.m., in 44° 12' N., 1° 38' W., sank the Norwegian S.S. Britta, 2,061 tons, in a convoy on its way up the coast (see U.46). U.C.69 was certainly in the same spot on March 30, for at 2.30 p.m., in 44° 14' N., 1° 26' W., she met the Italian S.S. Avanguardia, 2,703 tons, from Bougie (Algeria) to Cardiff, and sank her with bombs. She continued south into the angle of the Bay, and on March 31, at 6.15 p.m., in 43° 29' N., 3° 2' W., stopped the Norwegian S.S. Farmand, 1,387 tons, from Cardiff to Lisbon, and sank her with bombs. This was apparently her last victim, and she was back in Zeebrugge on April 6, having been out fourteen days and having sunk ten ships (eight steamers and two sailing vessels) of 15,202 tons.

242. Statistics, High Sea Fleet Submarines.—The following is a summary of the figures of the submarine campaign in March 1917. The number of High Sea Fleet boats operating to the westward was eighteen.³ They effected in all 307 cruising days, including their days of passage to and fro; they included two minelayers, U.C.43 and U.C.44, which laid their mines on the south coast of Ireland. Five of the High Sea Fleet submarines took the Dover route on the way out —U.70, U.48, U.C.44, U.85 and U.53—but only one, U.70, took it on the way home. There were, therefore, six Dover passages made by the eighteen High Sea Fleet submarines which went to the west.

¹ Teleg. E. 1 Log, A.30/21.

They sank in all ninety ships with a tonnage of 235,599 tons, or about 45 per cent. of the total sinkage by submarines, which may be taken as 507,001 tons.²

The average number of High Sea Fleet boats operating per day on the S.W. approach, St. George's Channel, was about ten,² and the average tonnage torpedoed per day 7,311 tons, or about 730 tons per submarine per day. The highest tonnage sunk was by U.44, viz., 31,726 tons; next came U.81, with 29,399 tons. The average length of cruise of the "U" boats was twenty-four days. On these eighteen boats during 307 cruising days there were ten attacks of importance which resulted in two boats being sunk.

These attacks were :-

March 2 .. U.44 by armed trawler Vale of Lennox (Ireland, N.W.).

3 .. *U.*48 by *T.B.*22 in the Channel.

6 .. U.C.43 by armed trawler Ben Earn (Ireland, S.W.).

8 .. U.53 by the sloop Zinnia (Ireland, S.W.).

 U.48 damaged by collision with S.S. East Point, off Eddystone.

 U.C.43 sunk by H.M. submarine G.10 off Shetland.

12 .. U.85 sunk by Q.19 in the Channel.

14 .. U.81 attacked by Q.16 (Ireland, S.W.).

28 .. U.57, Zinnia dropped d.c.'s (Ireland, South). 30 .. U.57, Q.25 in action with (Ireland, South).

Ten ships³ escaped by means of either gunfire, speed, favourable position, or the arrival of patrols.

March 3 .. Argyll. U.49. Gunfire and speed.

5 .. Cornelia, U.53. Arrival of H.M.S. Poppy.

6 .. Syndic, U.53. Gunfire, 7 .. Zambesi, U.48. Speed.

10 .. Arataca, U.44. Gunfire and H.M.S. Parthian

11 .. Spectator. U.44. Gunfire and speed.

11 .. Eddystone. U.62. Gunfire.

12 .. Marquise de Lubersac. U.85. Gunfire and speed.

12 .. Semantha. U.62. Gunfire and smoke screen.

13 .. Trecarne. U.62. Gunfire.

Ten ships were saved by the torpedoes missing them.

² The *Irma* is given by Marine-Archiv to *U.B.40*; but the latter could not have been there and off the Seine as well by 8 p.m. that evening (S. 236).

³ In addition four Flanders boats (*U.C.47*, *U.C.66*, *U.C.48*, *U.C.65*) were working for a time between South Coast of Ireland and Channel.

¹ Statistical Review December 23, 1918, Appendix A; British Vessels captured or Destroyed, Table F, Allied and Neutral Merchant Vessels gives 509,803 tons; figures in HS/TS.D. give 509,269 tons. It was approximately 500,000 tons. Three ships, the *Drina* (March 1), *Norwegian* (March 13), *Providence* (March 22) which have been previously attributed to submarines were mined (20,780 tons).

² In the first half of the month 11 to 13, in the second half 10 to 7.

³ For position, see submarine concerned.

243. Statistics, Flanders Boats, March.—The number of Flanders boats which operated in the Channel and to westward (Irish Sea, South of Ireland and France, West Coast) was fourteen. Their cruising days were about 174. The number operating at a time was five to seven. They effected the passage at Dover at least twenty-eight times. They sank seventy-four ships of 145,983 tons and fifty fishing vessels, making, say, another 3,000 tons. The tonnage per submarine per day was about 860 tons. The biggest tonnage was by U.C.48, 27,606 tons. They laid 216 mines, which effected the destruction of some ten ships, as follows:—

- March 17 .. Sloop, Mignonette, sweeping off Galley Head, U.C.66 on 14/3.
 - 18 .. Sloop, Alyssum, sweeping off Galley Head, U.C.66 on 14/3.
 - Fr. S.S. Michel, Ile d'Oleron, U.C.70 on 15/3. Norwegian S.S. Avra, Ile d'Oleron, U.C.70 on 15/3.
 - 22 .. Norwegian S.S. O. A. Knudsen, Owers, U.C.47 on 7/3.
 - 23 .. British S.S. Mexico, Beachy Head, U.C.17 on 19/3.
 - 23 .. H.M.S. Laforey, Dover, U.C.16 on 11/3.
 - 27 .. A.T. Evangel, and S.S. Providence, Barrels Light Vessel, U.C.48 on 17/3.

The British S.S. *Hermione*, which on April 14 struck a mine in the Coningbeg field, laid by *U.C.* 48 on March 17, was salved.

On March 14, at 5 p.m., the S.S. Orsova, and on March 15 at 4.5 a.m., H.M.S. Foyle, struck mines off the Eddystone laid by U.C.68 on March 12–13. The Orsova got into Plymouth; the Foyle was lost. The Valacia on March 31, at 5.30 p.m., in 50° 5′ N., 4° 16′ W., was not mined, but was torpedoed by U.59 and was brought safely into Plymouth Sound.

The number of serious attacks made in the Channel was five, as follows:—

March 3 .. H.M.S. Teviot on U.B.18.

14 .. Armed trawler Maristo on U.B.18.

19 .. Armed trawler Willet on U.B.18.

27 ... Armed trawler Rinto on U.C.72.

30 .. Q.7 on U.B.32.

U.85 was also sunk in the Channel by Q.19 on March 12.

The Bight boats working to the westward and the Flanders boats working in the Channel accounted between them for about 76 per cent. of the total tonnage sunk, as follows:—

201	Tota	al Tonnag	e Si	ink by S	ms.	
		N STATE OF THE PARTY OF THE PAR	Nu	imber of	Tonnage.	Per cent.
		ottly, its		Ships.	I SHAT HOW	
Western A	pproach	(Bight bo	ats)	68	213,9711	41
Channel ar				143	179,918	34.8
Mediterran		month both	10	32	51,413	10.1
North Sea				47	69,527	13.5
Unknown				3	1,333	.2
	Total	See.		293 ²	516,1623	

These figures were coming in daily. It was clear that unless the situation could be controlled in the Channel and still more in the Western Approach, the submarine campaign would break up the whole system of maritime trade and supply. The measures taken to prevent this catastrophe will now be reviewed.

CHAPTER XIII.

MARCH, 1917. MEASURES.

244. Patrolled Lane, Channel.—One of the principal measures proposed in December against the submarine had been the "Patrolled Lane" in the Channel, which had been instituted by Admiralty Order on January 21 and was working in February and March.

It may be well to summarise the strength of the patrols in the Southern Areas in March. They were:—

3	Yachts.	Trawlers.	Net Drifters.
	2	66 (58)5	130
	6	66 (55)	102
	3	30 (24)	8
	-		-
	3	54 (41)	22
	4	36 (18)	_
	-	1	-
	4	24	8
	1	6	-
	1	6	_
		Yachts. 2 6 3 3 4	Yachts. Trawlers. 2 $66 (58)^5$ 6 $66 (55)$ 3 $30 (24)$ - - 3 $54 (41)$ 4 $36 (18)$ - 1 4 24

¹ Of which, 16 ships of 18,080 tons were sunk in the North Sea at the beginning or end of Bight boat cruises.

Not including 42 British fishing vessels.

4 Vide S.26 (December).

¹ Sixteen if U.C.68 and U.C.61 are counted (S.233A).

 $^{^2}$ Or 252 including U.C.71 which laid mines on March 29 off Dieppe and St. Valery, and $U.C.68.\,$

³ Note.—Statistical Review, Admiralty, 1918, gives 507,001 tons.

⁵ Figures in brackets are number of minesweepers in total.

Of course, only a portion of these were on patrol at a time. Thus, at Portsmouth in the last week of March 16 trawlers and 14 drifters were on continuous patrol. The establishment of the patrolled lane had not, however, dispensed with the duty of escorting oilers and storeships along the coast, and in the week ending March 24 nine ships had been thus escorted. Briefly, its institution had meant a concentration of armed trawlers in the Channel. Thus, in December Portsmouth had 36 armed trawlers, of which 12 were minesweepers; by the end of March the number had increased to 66, of which 55 were minesweepers.

245. **Destroyer Forces.**—In the south the destroyer question constituted the crux of the problem, and during March there took place a gradual transfer from north to south.

The numbers2 were :-

The numbers were		4		
		Dover.		
		March 1.		March 31.
T.B.D.'s	32	(of which 3 paid	23	(of which 2 paid of
		off for repairs).		for repairs).
Lent by Harwich	Ni	1.	17	
T.B.'s	3		3 5	
"P" boats	6		THE RESERVE	
Total destroyers	32		40	(increase 8).
		Portsmouth.		
		March 1.		March 31.
T.B.D.'s for escort	10		12	
From 1st Flotilla				
(Harwich)	-		9	
From 15th Flotilla			1	
(Grand Fleet)	TE		1	
"P" boats for escort	6		G	(and 3 from Nore)
T.B.'s for escort	4		4	(and 5 from Note)
T.B.D.'s for port		411111111111111111111111111111111111111		
defence	10	(2 of which paid	9	HUN handwell
		off).		Managed
T.B.'s for port de-		PERSONAL PROPERTY.		
fence	18		18	
Newhaven T.B.'s	mg		1	
(escort)	4		4	inorgana 11)
Total craft	52		03 ((increase 11).
Total destroyers (escort)	10		22	increase 12).
(cscort)	10			mercase 12).

¹ Portsmouth Area, H.S. 595/178, 182.

Devonport.	
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	March 1.	March 31.
Escort work, 2nd		
Flotilla	14 (of which 1 paid off).	15
Escort work, 4th	193-10-10-10-1	
Flotilla	11	12
Lent by 14th Flo-		
tilla	# 1	4
Port defence,		
T.B.D.'s	6	5
Port defence,		
T.B.'s	8	8
Total craft	39	44 (increase 5).

Queenstown.

Bester was but and	March 1.		March 31.
Escort work, 1st Sloop Flotilla	19	19	
Escort work, 10th Sloop Flotilla T.B.D.'s from	6	4	
Grand Fleet "Q" ships	4	4 14	
Total	42	41	

At the end of March the figures were :-

	T.B.D.	T.B.	P. Boats.	Sloops.	"Q" ships.
At Dover	 40	3	5	CI CONTRACTOR	um I n-
Portsmouth	 29	8	9	DON'S TO	The state of the state of
Devonport	 38	-		The same of the sa	
Milford	 1	-	1		of the state of the
Queenstown	 4	-	VIII TO BE	23	14

A total for the South-Western Approach (Queenstown, Milford and Devonport) of 42 destroyers, and for the Channel of 69.

The Grand Fleet had lent 15 destroyers to the South, viz., 6 to Harwich, 4 to Queenstown, 4 to Devonport, and 1 to Portsmouth.

Harwich had transferred 8 (the 1st Flotilla) to Portsmouth and 11 "L" and "M" class destroyers to Dover, leaving with Commodore (T) only 10 in the 9th Flotilla and 26 in the 10th Flotilla, a total of 36, or including the 6 from the Grand Fleet, 42.

On March 31 the total destroyer strength of all sorts was about 340.

² From Positions and Movements, March 1 and 31, 1917.

Of these there were1 with the

						Per cent.
Grand Fleet			Josep W.		92	27.0
Forth					7	2.0
Humber	77.	(*/*) T		11	20	6.0
Submarine F	lotillas		4.4		8	2.0
Harwich					42	12.5
Nore	94				8	A CONTRACTOR
Dover					40	11.5
Portsmouth	21				29	8.5
Devonport					38	11.0
Queenstown	2.				4	1.1
Larne					4	1.1
Abroad				F.	32	9.4

On the south coast and at Queenstown there were then: Dover 40, Portsmouth 29, Devonport 38, Queenstown 4, a total of 110, or 32 per cent., of the total destroyer strength, or 28 per cent. if 14 local defence and other vessels be subtracted (Portsmouth 9, Plymouth 5).

The principal requirements had been reflected in December in the requests from the Commands. First had come a call for nine destroyers from Devonport and Queenstown, then for 12-pdr. guns for all trawlers; at Devonport all except four were armed with 6-pdr. and 3-pdr., which were regarded as "practically useless," a view with which the Admiralty, in the case of the 6-pdr. gun, did not agree, though all new trawlers were being armed with 12-pdrs.² There were also 262 drifters attached to Channel ports, though Dover thought that working in divisions they were useless; because they could be avoided "with the greatest ease" by submarines.³

246. Channel Routes.—On February 22 a conference had been held at the Admiralty, where it had been decided to establish "Traffic Lanes" for crossing the English Channel, applicable to the ordinary unescorted trade. The orders went out on March 12⁴ They directed vessels to zigzag; vessels coming west of Beachy Head

² M.010767, Commander-in-Chief, Plymouth, December 4, 1916, in B.1033/1916.

³ Vice Admiral, Dover, letter December 23, 1916 in X.11012/1917; German reports entirely bear out Admiral Bacon's opinion. were to do so in dark hours only; between Beachy Head and Dover they were to cross only by the particular Folkestone-Boulogne route laid down for the time by Vice-Admiral, Dover.

The other crossings recommended were St. Catherine's to Cherbourg and Lizard to Ushant. For the East Channel traffic was to be suspended or released by Vice-Admiral, Dover; for Beachy Head to Portland Bill by Commander-in-Chief, Portsmouth, and for Devonport to the westward by the Commander-in-Chief, Devonport.

Ships were to be completely darkened, except when ordered to use dimmed bow lights (e.g., on Eddystone, St. Catherine's to Owers, and when crossing Channel).

Vessels bound up Channel were to call at Falmouth for orders; vessels going down Channel were to receive their orders from the Shipping Intelligence Officers at Newcastle, Hull, London or at Southend, which had taken the place of the Downs for south bound traffic. In day time ships were to follow round the bays, at night time pass as close as possible to the headlands.

There seems to have been nothing very new in these orders, which merely summarised and embodied the practice in use at the time. These English Channel orders and routes did not, however, come into force till April 8.

Some amendments to Western Trade Routes went out as well on March 12. In the Atlantic routes the meridian of 10° W., to which ships had to steer at high speed without lights, was altered to 17° W.1 An additional route by the North of Ireland was added (Route 57) for ships from the Clyde and the Irish Sea proceeding to South Atlantic. Difficulties arose almost at once over the order. It told ships to reach Inishtrahull (North Ireland) at or just before dark. On March 26 Commodore, Larne, reported that merchant vessels were frequently collecting off Inishtrahull, where they steamed about waiting for dusk and offering in the interval an excellent target to submarines. As many as sixteen had been seen at a time, and he suggested that they should anchor in Lough Foyle. Lloyd's Station, too, in Inishtrahull made a practice of challenging all vessels with a powerful light, which merely advertised their presence to an enemy. The Admiralty thereupon, on March 28, issued instructions in accordance with Commodore, Larne's, proposal.

Admiral Bayly had met with the same difficulty in the case of merchant ships collecting off the Blaskets waiting for dark and had reported it on February 17, suggesting that they should anchor in Berehaven; at Portsmouth, too, Admiral Colville on April 4 pointed out that ships bound for Cherbourg were in the habit of cruising about off Anvil Point waiting for nightfall to cross, and recommended that they should anchor in Poole Bay.

¹ Positions and Movements, March 31, 1917, H.S.C.12. Grand Fleet includes—destroyers available (79), under repair (10), 3 paid off for repair; in addition there were 15 detached; total 107. At Portsmouth 6 destroyers were for Port Defence, and 3 attached to *Vernon*; at Devonport 5 were for Port Defence.

⁴ M.02787 as Amendment to Routes for Western Trade, M.09748 of February 5, 1917, with proposals of Director of Trade Division, in Case 504, Vol. II.

¹ Routes 18 (English Channel to North Atlantic); 47 (Clyde and Irish Sea to North Atlantic); 55 (Clyde and Irish Sea to South Atlantic); 79 and 86 (Bristol Channel to North Atlantic). In Case 504, Vol. II.

On April 13 the Admiralty issued a letter to deal with this danger, pointing out that vessels should be given a port or anchorage where they should wait with some form of protection at hand.

At Dover the ships waiting to cross collected at Folkestone, where they were guarded by destroyers, and had never been attacked.²

247. New Approach Routes.—Meanwhile the Routes for Western Trade were also under review. In the new issue of February 5, 1917, new routes had been added for the North Atlantic trade giving the Blaskets³ as a departure point instead of the Fastnet. In February, however, a signal had been intercepted from U.84, working off the S.W. of Ireland, that homeward bound traffic was making 52° N., 12° 30° W. by dusk. This meant that the new Blaskets approach had been discovered, and after communicating with Admiral Bayly⁵ at Queenstown, the Admiralty proposed to adopt "a considerably wider angle of approach" with a view to ensuring effective dispersion.6 As it would be impossible to patrol the whole area reliance would have to be placed on vessels following routes widely divergent from one another. Vice-Admiral Bayly agreed, and the change was introduced on March 2.7 This was the beginning of the new Approach Route System, which took the form of four great cone-shaped Approach Routes (or rather areas of approach) from the west, designated from the south A, B., C, D and demarcated as follows:-

Approach Routes.8

Approach Route A (Scillies Approach).—Ships were to cross the meridian of 17° W. between 45° N. and 48° N. and the meridian of 10° W. between 48° N. and 49° 30′ N., then make the south coast of the Scillies at dawn.

Approach Route B (Ireland, S.W. Approach).—Ships were to cross the meridian of 14° W. between 50° N. and 53° N. and make the coast of Ireland at dawn between the Fastnets and Blaskets at one of the following points:—Fastnets, Mizen Head, Dursey Island, Skelligs or Blaskets, then hug the coast of Ireland to the Tuskar.

Approach Route C (North Ireland Approach).—Ships were to cross the meridian of 14° W. between 53° N. and 55° 30′ N., make the coast of Ireland between Eagle Island and Tory Island, then hug the North Irish coast.

Approach Route D (Orkneys Approach).—Ships were to cross 15° W. between 58° N. and 59° 30′ N. and cross 6° W. to northward of 59° 20′ N. Then pass between Fair Island and the Orkneys during daylight.

Vessels were to be given separate routes within the limits of the approach route, and an exact point to make the land, which was to be varied for each vessel.

248. Routes, New and Old.—It is important to remember that these new Approach Routes did not supersede the Western Trade Routes. The latter had been the subject of a Conference at the Admiralty only on February 22; they still remained in force and were supplemented by Route Instructions for the English Channel.¹

The Approach Routes were evidently intended for homeward bound ships while the Western Trade Routes remained in force for those outward bound.

The system no doubt facilitated the old policy of dispersion, but it involved the distinct anomaly that on occasions when a Western Trade Route was closed for outward bound ships on account of the presence of submarines, homeward bound ships were arriving practically by the closed routes in one of the Approach Areas.

Thus, on March 1 (the day before the instructions for the Approach Routes went out) the route along the south coast of Ireland was closed for outward bound ships under Routes in force (Western Trade)2 leaving open only the North Ireland Route for west coast traffic and the "Scillies to Westward" Route for Channel traffic. But the very next day (March 2) a telegram³ went out to Gibraltar, St. Vincent, Rio and Monte Video, instructing ships proceeding to the Clyde and Irish Sea to use Approach Route B (i.e., Blaskets and Fastnet), which involved the use of the South of Ireland Route. Therefore, while the South of Ireland Route was closed practically the whole month under "Western Trade" orders for outward bound traffic, it was open for homeward ships under Approach Route orders. U.53, U.C.47, U.C.48 and U.57 and others working on it during the month were able therefore to take a considerable toll of homeward bound ships, amongst others British S.S. Folia, 6,702 tons, March 11; March 14, British S.S. Brika, 4,139 tons; March 17,

¹ M.04147/17 in Case 504, Vol. II.

² Vice-Admiral, Dover, December 23, 1916, in X.11012/1917. Admiral Bacon cited this immunity as an example of the submarines' hatred of destroyers or trawlers armed with depth charges.

³ Routes 27, 28.

⁴ Signal February 24, 1917, War Diary, I.D. 3025/113.

⁵ Telegram, February 25, 26, H.S. 362/88, 259, 318.

⁶ First Sea Lord to Vice-Admiral, Queenstown, February 26, 2250, H.S. 362/639.

⁷ Telegram, March 2, 1917, 0450, H.S. 386/16.

⁸ Case 636, Vol. I, Approach Routes. M.02567, March 5.

⁹ i.e., the south coast.

¹ See S.246

² Routes in force 1, 3, 5, 18, 26, 31, 43, 61, 75, 86. Admiralty Telegram, March 1, 1917, 0005, H.S. 386/10.

³ Admiralty Telegram, March 2, 1917, 1835 in Case 636, Vol. I (not in H.S. 386).

⁴ There was no "switch" route from the south round the north of Ireland.

British S.S. Antony, 6,446 tons. The Antony, which was torpedoed off Minehead by U.C.48, left Lisbon on March 13, and was following route instructions given by the Consul there. In the minutes on her loss no word was said of the South Coast of Ireland Route being closed at the time for outward bound ships according to Routes in Force.¹

The case of the British S.S. Holgate, 2,604 tons, sunk by U.57 on March 27, 10 miles west of the Skelligs, is another instance of the sort. She was coming from Gibraltar to Barrow with iron ore, and received her route instructions at Gibraltar on March 17th, the South of Ireland and Blaskets and Fastnet Routes being closed at the time for outward bound ships.² On March 27, when the Holgate arrived in Home Waters, the only routes open for outward bound ships were by North of Ireland, Ushant and Scillies.³ The South Coast of Ireland was closed. If it was dangerous for outward bound⁴ ships, then it was apparently equally dangerous for homeward bound ships, but these came under the Approach Route system, which was not working in step with Western Trade routes.

On the other hand, it must be remembered that a number of ships affected, to whom the Approach Routes were given, were ships with valuable cargoes, and in their case the date and time of passing 14° W. (or 10° W., in case of Approach Route A) was wired to the Admiralty and constituted their rendezvous. They were met by destroyers and sloop escorts and came in under escort. And, further, while outward bound ships could be effectively controlled at their port of departure, homeward bound ships could be reached only by wireless, which many did not carry.

248A. Queenstown.—The burden of attack fell most heavily on Queenstown. In January, Vice-Admiral Bayly had pointed out that the South of Ireland route which had previously only occasionally been used, was now coming into continuous use, and it would be very hard to make head against an onset made on it.⁶ He had under him at Queenstown—

17 Sloops of First Sloop Flotilla.

5 Minesweeping Sloops of Tenth Sloop Flotilla.

4 Destroyers⁷ lent by Grand Fleet.

1 M.63840/17.

³ Admiralty telegram March 20, 2135, Routes in force were 1, 3, 5, 18, 26, 86 (Scillies), 31, 61, 91 (Ushant), 43, 57, 75 (North of Ireland).

⁵ Telegram, March 2, 1917, 0540 in Case 636, Vol. I.

The destroyers had joined in February and were kept fully employed, escorting specially valuable ships. Of the sloops there were usually some nine or ten out, of which two patrolled along the South Coast and the remainder out to 14° West (some 150 miles) along the Trade Route in force. There were also four Yachts, twenty-four Trawlers and eight Net Drifters.

During March, a number of British submarines were also despatched to Ireland to take up a submarine patrol to the westward. In February (February 19–27) the *Vulcan* had carried out a patrol with *D.3*, *D.7*, *E.32*, and *E.54*, off Eagle Island, and on March 5, the *Adventure* (Captain Nasmith) left Queenstown with six submarines, *E.54*, *E.32*, *D.7*, *D.8*, *D.3*, and *H.5*, and proceeded to 53° 40′ N., 10° 35′ W., where they parted company to patrol.

On March 8, at 5 p.m., E.32, patrolling in about 55° 30′ N., 10° W., sighted a submarine and attacked at full speed, but it drew rapidly away on the surface.² This was possibly U.C.43, which escaped, only to run, two days later, into another submarine patrol, and to be torpedoed by G.13 off the Shetlands.

These preliminary cruises culminated towards the end of the month in the stationing of the *Vulcan* (Captain Martin E. Nasmith, V.C.) at Queenstown, with *E.32*, *E.48*, *E.54*, and *H.5*, and of the *Platypus*³ at Lough Swilly, with *D.3*, *D.7*, and *D.8*, to maintain patrols to the northward and westward of Ireland.

Apparently, there were difficulties in keeping the submarines fully informed of the latest positions of German submarines, for on March 3 D.A.S.D. (Admiral Duff) remarked that the line on which they had been spread⁴ was not apparently the most advantageous. On the other hand, they could only be kept fully informed by wireless and if the source of information was not to be compromised, then, "the less wireless, the better." 5

At the end of the month (March 31) Q.13 sailed from Queenstown with E.54, and H.5, and sighted a submarine on April 2 at 9.30 a.m., in 51° 40′ N., 11° 5′ W., but it would not close. On April 5, at 10.57 a.m., she was not far off when U.46 torpedoed the British S.S. Benheather, in 51° 20′ N., 12° 30′ W., off the Fastnet. U.46 made off but returned to sink the ship by gunfire, and E.32 waiting by the wreck was able to fire three shots at her at 1,000 yards, all of which, unfortunately, missed.⁶

² M.03658/17.

² Routes in force were 1, 3, 5, 31 (Bay Routes) 43, 57, 75 (North of Ireland);
61 and 91 (Ushant). Admiralty telegram, March 16, 0010.

⁴ For Outward Bound ships the South Coast of Ireland had been open for only two days on March 18 to 20 for Defensively Armed Merchant Ships. Admiralty telegram, March 18, 1917, 1736 and March 20, 1917, 2135.

⁶ Vice-Admiral, Queenstown, January 8, 1917 in M.0340/17, Protection of Traffic Routes.

Magic (11), Narwhal (12), Peyton (14), Parthian (15). For names of sloops, see Position and Movements, March 1, p. 22

¹ See Queenstown Reports, H.S. 650/49 March 1.

³ The *Platypus*, 3476 tons, commissioned March 27, Commander Charles G. Brodie, H.S. 390/893. On April 26 it was decided that *Vulcan* should be based on Lough Swilly and *Platypus* on Killybegs.

⁴ Off Eagle Island in about 55° N., 10° 20′ W. M.02525/17.

⁵ Chief of War Staff Minute, March 4, 1917 in Idem.

⁶ M.04571/17 in L.598/1917.

A number of submarines were seen and attacked and the patrol justified itself a month later when E.54 was able to claim its first victim1 in U.81 (May 1 1917).

Oueenstown's principal weapon, however, was the O ship and of these Admiral Bayly usually had a dozen out. On March 112 these were: (Plan 32)

South Coast Ireland. O.24 (Laggan).

South Coast O.4 (Carrigan Head), 50° N. to 20° W. Ireland Westward .. 0.16 (Heather), 50°30' N. to 51°30' N.,

9° W. to 12° W. 0.27 (Warner), 50° 30' N. to 52° N., 9° to 14° W.

Q.11 (Tamarisk), 51° 30' to 52' N., 11° to 15° W.

Q.10 (Begonia), 50° to 52' N. to 16° W. O. 3 (Echunga), 51° to 53' N. to 20° W.

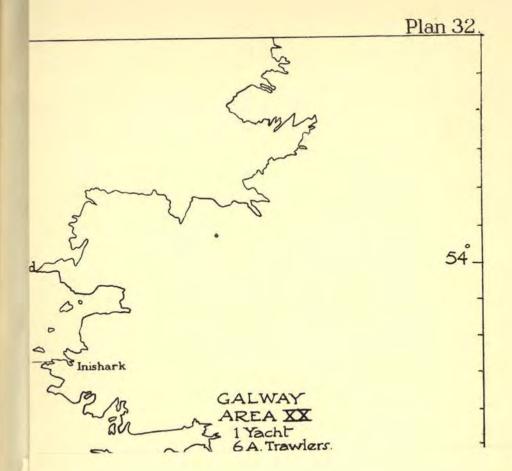
West Coast ... O.14 (Viola), Loop Head to Skelligs. 0.15 (Salvia), Achill Head to LoopHead

North Ireland .. 0.8 Vala. English Channel .. 0.2 Intaba.

During March in the south-west approach, they were responsible for four determined attacks on enemy submarines.3

The only successful one, however, was the sinking on March 12 of U.85 by 0.19, which took place in the Channel.

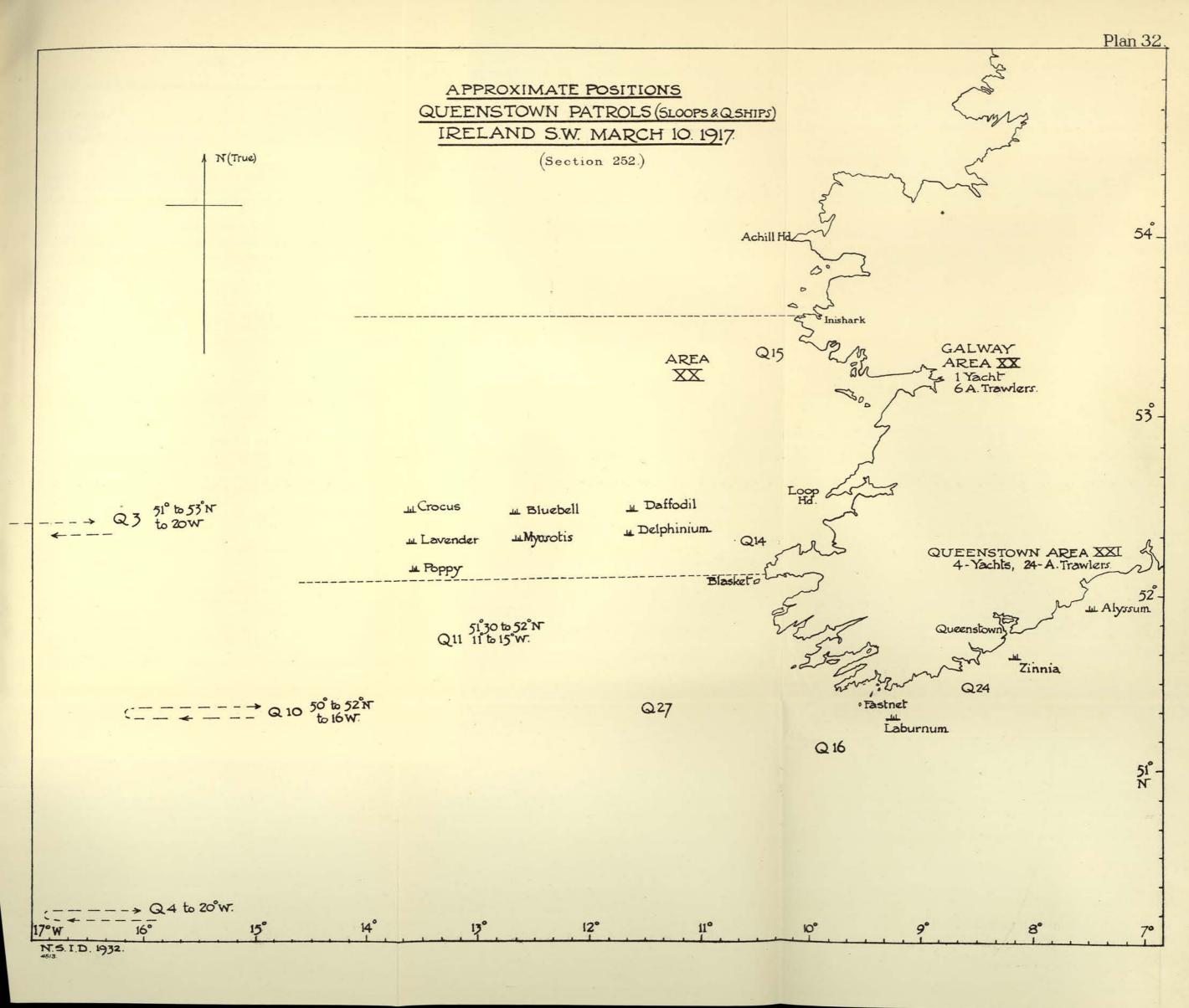
249. Traffic Figures.—One of the greatest obstacles in the way of a comprehensive study of the early months of the submarine campaign is the lack of sufficient Traffic statistics. The D.A.S.D. stated that in December in the Channel there were some 40 ships going West daily, and the same number East,4 which would mean a through Channel traffic of some 2,400 ships a month. In addition. 912 transports crossed the Channel to France during March, 5 an average of 29.4 per day, making an approximate total of 1.824 going and returning. This makes a total, not counting the French Coal Trade, of at least 4,224 ships moving in the Channel during the month. Of the transports, which crossed under escort at night, none were sunk. Of French coal trade, under escort or convoy, one6 or two were sunk.



¹ Altogether this submarine patrol sank two German submarines, U.81 as above and U.45 by D.7 on September 12, 1917. Admiralty Instructions of May 3, 1917, M.05530/17. 2 H.S. 650.

⁸Q.16, March 14; Q.23, March 15; Q.7, March 8; March 30; Q.25, March 30. For armament and reports of attacks, see C.B. 01486, Actions, Special Service Vessels.

⁴ M.011139, D.A.S.D., December 16, 1916, Channel Traffic. ⁵ Telegrams to Marine Paris, H.S. 389/200 to H.S. 393/1052. ⁶ British S.S. Chatburn, March 1; Asbjorn, March 10.



Of ordinary trade over 100 tons there were sunk:

British				6	Norwegian	4.00	4
Belgian	200	MILEN !		1	Greek	and the	1
Danish			Port of the	2	United States	1.7	2
French	158911	il service	0 50	01	Swedish		3
							-
							10

making a total of 20 ships sunk out of 4,224 passages, or .48 per cent. But as the actual number of ships in question must have been much less² (say at most, 2,000) the percentage may be taken as about one per cent. In the Channel then, the escort and patrol system was able to compete with the submarine in March 1917.

The figures for the Western Approach are more difficult to estimate. According to the Trade Division paper of December 24 19163 the estimated monthly sailings of British vessels to the United Kingdom and France from Halifax, Boston, New York, Philadelphia, Norfolk and Baltimore were about 242. The number of British ships sunk in the Western Approach on their way to United Kingdom and France during the month was 15, which would mean a loss of 6.2 per cent. From February 22nd to March 10, 110 British vessels with Government cargoes sailed eastward, of which six were sunk, or a percentage of 5.4 per cent.

250. Measures, March 1 .- At the end of February, when intercepts indicated that U.70 was on her way north-about Admiral Bayly was instructed to strengthen the patrols on the South Coast and to send two destroyers to Milford, and accordingly hastened off the Magic and Narwhal on March 1. The same day the South of Ireland was closed for outward bound ships.⁵ The first two days of the month passed without any sinkings in the South-West Approach. One large ship, the British S.S. Drina, 11,483 tons, was lost off Skokham Island (Milford Haven) on March 1. She was a R.M.S.P. boat with meat and coffee going from Buenos Avres to Falmouth, when, at 11.57 p.m., a heavy explosion occurred, in 51° 41' N., 5° 20' W. It was thought at the time that she had been torpedoed, but no periscope nor wake was seen, nor was any submarine in the vicinity. She almost certainly struck two of the mines laid off Skokham Island by U.C.65 on February 9.6 Fifteen lives were lost in her.7

¹ French lost 24 small sailing vessels under 100 tons.

² For instance, in the 1,824 transport crossings there were probably not

more than 400 ships concerned.

3 M.0533/17, H.W. VII, p. 240.

4 Telegram, February 28, 2010, H.S. 362/1260.

5 Telegram, March 1, 1917, 0005, H.S. 386/10.

6 In 51° 40′ N., 5° 17′ W.

⁷ M.02527/17, X.11973/17.

In the Channel, the activity in the beginning of the month was small. In the West, Devonport usually had three destroyers¹ patrolling and searching. Three others with the *Owl* were busy escorting Portuguese troops from Lisbon to Brest.

At Falmouth on March 4 there were still 23 Dutch ships beleaguered by the submarine campaign, afraid to move, and blocking up the harbour.²

On March 3 U.70 and U.49 were in the South-West Approach, and with U.44 and U.62 sank no less than seven ships within a week.³ It was on the 8th that the Queenstown sloop Lavender picked up survivors of the Fenay Lodge, the Caldegrove and French S.S. Ohio, sunk on March 6 and 7, and it became clear that a serious attack was developing in the Fastnet Approach, which was complicated by the partial closure of Queenstown on March 8 on account of mines laid by U.C.44 two days before.

Not far from the Fastnet a good attack was reported (March 8) by Q.7, Penshurst (Commander F. H. Grenfell, R.N., retired), a steamer of 1,191 tons armed with one 12-pdr., two 6-pdrs., and two 3 pdrs. She had been standing up the West Coast of Ireland in the forenoon, when a report came in from the sloop Zinnia of a submarine seen on the surface off the Fastnet at 10.40 a.m. 0.7 accordingly altered to S. 52 E. At 12.15 p.m. in 51° 21 'N., 10° 1' W., a submarine was sighted on the starboard bow about four miles off and course was altered as if to escape. This brought the submarine guns into action; the ship stopped and the "panic" party began to lower the boats. At 3,000 yards shell splinters were falling round and as the submarine would not close, Q.7 opened fire at 12.42 p.m. The submarine, which was U.C.44 (S.220), dived, having apparently received two hits, one from the 12 pdr. and one from the 3-pdr.4 The news of the loss of the Fenay Lodge, the Caldegrove (on the 6th) and the French S.S. Ohio (sunk by U.44) had meanwhile reached the Admiralty, making thirteen fair-sized ships sunk in the South-West Approach between March 1 and 8, and on March 9 the First Sea Lord suggested to Admiral Bayly that the Vulcan's submarines should work out to 15° W., where these losses had taken place.⁵ Another submarine (U.48) had meanwhile appeared in the West of the Channel and attacked the Zambesi, off Falmouth, on March 76 which seems to have led to a stoppage of traffic, for on March 9 the Commander-in-Chief, Portsmouth, was asked if the

French Coal Trade was being held up and was told that stoppage of traffic was not to affect it unless specially ordered.¹

251. March 10, "G.13" Sinks "U.C.43."—The next day (March 10) came in the welcome news of the definite destruction of a submarine. G.13 (Lieutenant G. F. Bradshaw), off the Shetlands had got a torpedo home. On March 3, she had left the Tees (Lucia) with E.49 to patrol off Muckle Flugga (Shetlands). Leaving Scapa on March 8 she had barely begun her patrol, when at 11.30 a.m. she sighted a large submarine loom for a moment out of a snow squall ahead. It must have seen her for it dived at once without offering a chance for a shot. On March 10, G.13 had better fortune. At 3.55 p.m., in 60° 57' N., 1° 11' W., off Muckle Flugga, she sighted some six miles off, a submarine bearing 110°, and apparently steering 270°2 and dived at once to attack. At 4.49 p.m., the range was 2,300 yards and Lieutenant G. F. Bradshaw fired both bow tubes on an 8-point bearing. One got home just behind the conning tower at 4.52. The submarine sank at once, leaving on the surface a small lake of oil fuel and some pieces of broken plank. The submarine was U.C.43 (Lieut.-Commander Erwin Sebelin). The Captain of G.13 (Lieutenant G. F. Bradshaw) received a D.S.O., and Acting Lieutenant J. A. P. Blackburn, R.N.R., a D.S.C.3

Off Waterford, that same day (March 10) U.53 had begun a sustained raid on the South Coast of Ireland which had been almost immune since the beginning of the month. Then came three crowded days when U.53 was busy off Waterford and U.C.47 and U.C.66 were beginning to attack the shipping off Lyme Bay between the Start and Portland. They sank three ships there on March 12.

Devonport had four destroyers looking for them—the *Hardy*, *Contest*, *Christopher* and *Orestes*—but the submarines apparently never gave them a chance of approach.

252. March 12, "Q.19" Sinks "U.85."—Fortunately there was a "Q" ship in the area—Q.19, the *Privet*, Lieutenant-Commander C. G. Matheson, R.N.R., a steamer of 803 tons mounting four 12-pdr. guns. On March 12 she was on her way from Lands End to Alderney, proceeding S.75 E. At 2.50 p.m. she was in 49° 52′ N., 3° 10′ W., when a torpedo passed under her from starboard to port. It was a misty day⁴ and nothing could be seen of a submarine, but the guns were manned and everyone was on the alert. Suddenly at 3.5 p.m. a submarine rose on the starboard quarter and opened fire at 2,400 yards. The first shot went over ahead; the fourth shot hit, passing

¹ On March 1, Medina, Spitfire and Orestes.

² H.S. 386/993.

³ For particulars see under submarines concerned.

⁴ H.S. 648/26. Commander Grenfell who already had a D.S.O. and bar was promoted to Captain (retired), Lieut. W. S. Harrison, R.N.R., received a D.S.C. *U.C.*44 was not hit. H.S./Q.28.

⁵ H.S. 387/1015.

⁶ March 7, 1917, 1445.

¹ H.S. 387/1054.

² U.C.43 was homeward bound.

³ H.S. 627/39, 51, 198.

⁴ S.S. Memnon in M.O. 3052/17.

through a depth charge. The ship was stopped after the second shot and the "panic" party were getting ready to abandon ship when they were scattered by a shell which burst amongst them causing several casualties, destroying the boats and their falls and frustrating the whole manœuvre. About 3.18 p.m. another shot penetrated the engine room and damaged the engines. At 3.22 the ship moved ahead to port to bring the port battery to bear on the submarine astern, sending out an S.O.S. call and at 3.25 p.m. opened fire at 2,000 yards with the port battery. The submarine had only time to fire one more round when a hail of shell burst on her. Q.19 got off nine salvos and counted four hits. The first salvo missed; the second hit a little below the fore part of the conning tower; the third salvo went short; the fourth hit again abaft the conning tower. At 3.30 p.m. the submarine disappeared stern first at an angle of about 45° and was not seen again. The Privet was in a bad way. The engine room was filling up and by 4 p.m. the floor plates were under water. The wounded were got into boats, and at 4.25 p.m. the destroyer Christopher came on the scene, followed by the Orestes, and took the crew aboard. At 6.30 p.m. the captain returned to the ship and got her in tow of the Orestes at 7.30 p.m., but just as she was entering Plymouth the bulkheads gave way and Q.19 went dismally down in sight of port about 3.30 a.m. off Picklecombe Fort.1 No survivors nor wreckage had been seen, and Admiral Colville was doubtful at the time whether a submarine had been destroyed, though he considered Lieutenant-Commander Matheson deserved the highest praise for the gallant way in which he had fought his ship. But no other German submarine reported the action and as nothing more was heard of U.85, this must have been her end. Lieutenant-Commander C. G. Matheson, R.N.R., received a D.S.O., and the ship received the award of £1,000.2

The very same day (March 12) came in a report from the Tees of a possible success. At 4.5 p.m., in 54° 38′ N., 0° 55′ W., the destroyer Medea was towing a paravane which fired in 22 fathoms of water. Mines had been laid there that morning, and it was thought possible that the minelayer had been sunk.³ It is now known, however, that she was U.C.30, and that she got home. The paravane may have struck the wreck of the S.S. John Miles, which had been sunk near the spot. A more definite casualty had occurred in the south, where on the night of March 12, U.B.6, a small Flanders boat, had stranded on the Ribben Shoal on the Hinder Bank (south of Hook of Holland) and was later ordered by the Netherlands Government to be interned. U.C.47 that day (March 12) had made an attack on

¹ M.03465/17 in A.2428/1917 Commander-in-Chief, Portsmouth March 21, 1917.

3 M.03560/17, X.8304/17, see S.169.

the fishing fleet off Trevose Head on the North Cornish coast and had sunk ten of them, which resulted the next day (March 13) in a message to the S.N.O., Falmouth, to try and arrange a scheme of protection by "grouping."

A difficulty with cross intercepts had arisen. On March 10 Admiral Bayly had sent out a signal to his patrols, in Auxiliary Code, warning them that from March 14 to March 20 British submarines would be operating between 51° 30' N. and 52° 30' N. and between 15° W. and 17 W.1 This was decoded by the Germans and a warning to submarines sent out from Bruges2 on March 12, which was read in its turn at the Admiralty, causing a momentary stir between Queenstown and Whitehall. Admiral Bayly cancelled the sailings of the submarines at once, ordering the Adventure and her five submarines to remain at Galway and suggesting they might work between Oueenstown and the Scillies, but the First Sea Lord thought this area too confined and suggested employing them on Approach Route C.3 till a special station code could be made out for them.4 The S.W. Approach was suffering heavily at the time. A submarine (U.61) had sunk two ships in the Blaskets area on the early morning of March 13 and had sent a torpedo into the "Q" ship Warner (0.27)5 which had blown up and gone to the bottom leaving some of her crew to be taken prisoners to Germany and some to be picked up on March 15 by D.3, one of the Vulcan's submarines. Sixty miles to the westward the next day (March 14) another "O" ship encounter took place when 0.16, the Heather, engaged a submarine6 which scented danger on seeing the sloop Daffodil and started to dive before fire had been opened, letting go a torpedo later which missed astern. (Plan 32).

253. Mines off Plymouth, March 14.—German submarine mine-layers were as active as ever⁷ and scored a distinct success at Plymouth on March 14. The *Orsova*, an Orient liner of 12,036 tons, on the way from London to Devonport, at 4.50 p.m., was three miles off the Eddystone, 50° 11′ N., 4° 11′ W., steering for Plymouth at 17½ knots when an explosion occurred in which eight lives were lost. Tugs were quickly on the scene and the ship was beached safely at 9 p.m. in Cawsand Bay. A warning went out of mines⁸

1 H.S. 388/1091.

² M.03465/17, Commander-in-Chief, Portsmouth, March 21, 1917, titled A.2428/1917 (S.W. App. I).

⁴ Surrendered later at Harwich, February 25, 1919.

² War Diary, I.D. 3026/51.

⁸ Eagle Island Approach, 53° 30' N., to 55° 30' N.

⁴ H.S. 388/1043, 1101, 1360.

⁵ See U.61, S. 218.

⁶ See U.81, S. 222.

⁷ During the month Flanders submarines laid minefields as follows:—in the Channel, 19; off Liverpool, 5 (*U.C* 65); France, West, 10; Ireland, 7; North Sea, 21; High Sea Fleet submarines laid:—England, East, 17; Scotland, East, 14; Scotland, West, 2; Orkneys and Shetlands and Scotland North, 14; Ireland, South, 6—a total of 115.

⁸ Received by Boyne (destroyer on patrol) at 7 p.m., M.11255/17.

S.E. of the Eddystone, and at 8 p.m. a dangerous area was declared. The master, however, was positive that he had been torpedoed. and as the Admiralty, quite independently of the incident, had stated that it was not in favour of keeping shipping close to land, the signal was cancelled about 12.15 a.m. This had unfortunate results. At 5 a.m. (March 15) the destroyer Foyle (Lieutenant A. H. D. Young, R.N.R.) was patrolling some miles to the eastward, 50° 11′ N., 3° 58' W., when she, too, struck a mine which blew off the whole fore end of the ship with a loss of twenty-seven of the crew. Three men were imprisoned in the wreckage forward; the ship was in a sinking condition and the leg of one of them had to be cut off with a clasp knife to set him free. The tug Industrious arrived on the scene at 1.10 p.m. and pulled the ship painfully towards harbour stern first, but she was making water badly and at 2.50 p.m., three miles from port up-ended and sank in 50° 16' N., 4° 10' W. There was no doubt that she had been mined and a dangerous area was again announced that afternoon.1

254. "U.48" and the 11th Flotilla, March 15.—The afternoon of March 15 was heavy with submarine reports, G.13 had returned from patrol and the report of her success on March 10 (U.C.43) came in at 3.41 p.m. An hour later came in the report of the loss of the Foyle (4.32 p.m.) in the Straits of Dover. The signal taken in from U.48 on March 14 at 7 p.m. reporting herself in 60° 30' N., 1° 29' E.2 steering for Lynvig and unable to submerge the conning tower had been passed to the Commander-in-Chief at 12.15 a.m. (March 15) and the Kempenfelt with her duty division had gone off hot on the trail. Another directional had come in locating her in 58° 40′ N., 3° 41′ E. at 6 a.m. and at 6.4 p.m. came in the welcome news that at noon she had been found and sunk. This was an immense encouragement, and the First Sea Lord sent off personal congratulations to the Commander-in-Chief. Disappointment, however, followed. At 4.33 U.48 signalled her position off Horns Reef,4 and two days later, March 17, G.12 arrived with a report of the attack, two hits on her conning tower, and a vivid account of four depth charges exploding unpleasantly close. The disappointment was not diminished by a signal from Bruges warning all

submarines to beware of four British submarines (Queenstown's) working in 53° 30′ N. between 11° W. and 14° W., showing that Bruges had intercepted Admiral Bayly's second signal.

255. Scillies Route Closed, March 16–18.—One of the principal routes from the Channel to North Atlantic ports was the Scillies Route, which ran out roughly 260°¹ to 10° W. An attack had been begun there on March 12 by a submarine (U.62) which had sunk five ships by March 14, on which day she reported lively traffic there.² This evidently brought U.70 down from St. George's Channel, who sank four more ships up to the 16th. It was evidently these sinkings which led to the closure of the route early in the morning of March 16,³ leaving open only the routes by Ushant (31, 61 and 91) and by the north of Ireland (43, 57, and 75), U.70 turned to go home by the Channel on March 16 or 17, and the route was opened again on March 18⁴ for defensively armed ships.

256. Queenstown Losses.—Between U.79's visit in August 1916⁵ and January 1917, no minelayer had visited the south coast of Ireland. The new year ushered in a resumption of their work. On February 12 U.C.33 (Flanders) laid fourteen mines off Queenstown and Old Head of Kinsale. A concentrated effort followed in March. On March 6 U.C.44 (High Sea Fleet) laid eighteen mines on the coast between Queenstown and Waterford. U.C.436 (H.S.F.) laid another cargo about the same time, evidently off the Fastnet and Seven Heads. The Flanders boats then took up the tale; U.C.66, on March 14, laid eighteen mines off Queenstown, the Old Head of Kinsale and Galley Head; and U.C.48 followed two days later (March 16) with another cargo of eighteen for Waterford and the eastern portion. The increasing pressure on the minesweepers, severely felt since the middle of February, culminated on March 177 in the blowing up of the sloop Mignonette while sweeping on the Galley Head minefield. The Alyssum followed on the same field the next day8 (March 18). Their loss seriously depleted Admiral Bayly's minesweeping strength, and he asked for six motor launches to fill the gap. Possibly to clear the pressure due to the closure of the "Scillies West" route, the South Coast of Ireland route was opened for defensively armed merchant ships for two days on March 18.9

¹ M,11255/17, C.M., April 10, 1917. The mines were probably laid by U.C.68. U.C.17 laid 4 mines off the Eddystone on January 20 (Field 282b) and 6 on February 17 (Field 303b). In addition, 18 mines are stated to have been laid by a submarine which did not return. This was probably U.C.68 (sunk April 10) which may have laid them about March 12–13. After the mining of the Orsova and Foyle 10 mines were found between March 16 and 19. H.S.B. 170/439, 545. German Statement of Mines makes no mention of Plymouth between February 17 (U.C.17) and May 8 (U.C.48).

² 70 miles East of Shetlands. See S.216.

³ H.S. 389/352.

⁴ March 16, 0433, in 55° 20' N., 8° 15' E. I.D. 3036, p. 63.

¹ Amendment of March 14—from Scillies and Wolf steer to cross 10° W. between 49° 30′ N and 48° N.

² 100 miles South of Fastnet March 14, 1200. I.D. 3026/56.

³ Telegram, March 16, 1917, 0010, H.S. 389/674.

⁴ Telegram, March 18, 1917, 1736.

⁵ O.U. 6020A, 1916, Field 7.

⁶ Sunk by G.13, O.U. 6020A, p. 70.

⁷ 9.30 a.m., Lat. 51° 31½′ N., Long. 8° 55′ W. 8 11.54 a.m., Lat. 51° 31′ N., 80° 55½′ W.

⁹ Telegram, March 18, 1917, 1736, H.S. 390/546, and March 20, 1917, 2135.

257. March 30, Hospital Ships .- On March 21 came in the news of the hospital ship Asturias having been torpedoed six miles south of the Start.1 She was subsequently beached but the attack on her raised the whole question of hospital ships in the Channel. On January 31 the Germans had announced their intention of sinking all hospital ships within the lines Terschelling to Flamborough and Lands End to Ushant. On March 22, in view of the attack on the Asturias, the advisability of altering the hospital service from Avonmouth to Brest was under consideration,2 and on March 26 the Divisional Transport Officer at Southampton was ordered to suspend all sailings of hospital ships.3 The next day (March 27) he was told they could be resumed, but ships were to be darkened in the area between the lines Flamborough to Terschelling and Lands End to Ushant;4 then, on March 28, the War Cabinet decided that in this area hospital ships were to be armed and painted and escorted like ordinary vessels, but this order was suspended in its turn on March 29,6 and was followed on April 5 by the French Government's decision to continue their illumination and to place distinguished prisoners on board as hostages.

258. Scillies Route, March 20.—The Scillies West route had been closed since March 16. It was opened on March 20,7 but was evidently not in favour, for, on March 21, the Admiralty asked Admiral Bayly if he had any "Q" ships available for the patrol of the North of Ireland routes by which the detained vessels would be proceeding. Q.16 (the Heather, one 4-inch, two 12-pdrs.) was already working on that route, and Admiral Bayly ordered 0.15, the Salvia, then off the Blaskets (Ireland, S.W.), to help her.8

259. Irish Sea and Start. On March 22 U.C.65 began an attack on the Irish Sea by laying mines, for the first time in the war, off Liverpool. In the next six days she sank fifteen ships of 15,613 tons. and her mines off Liverpool sank one small ship and, a fortnight later, struck two large ships of over 10,000 tons, which, fortunately, managed to make the port.9

In Lyme Bay, U.C.17, on her way westward, and U.C.48, homeward bound, sank four good-sized ships. The difficulties of the Commander-in-Chief, Devonport, may be deduced from the distribution of his destroyers on March 22. The Brisk and Attack

were told off that day to escort H.M.S. Prince of Wales; the Acheron and Lapwing for H.M.S. Hibernia; the Alarm and Tigress for H.M.S. Duncan; and the Ariel and Goshawk for the Orcoma's convoy.1 The next day instructions came from the Admiralty to send all available destroyers of the 4th Flotilla to hunt for the submarine operating off the Start,2 but five were already out hunting and on patrol (the Hardy, Orestes, Contest, Spitfire and Medina), and no less than seven had been told off to sail on March 24 to escort the Orcoma.2 A regrettable loss in this attack was that of the Rotorua, of 11.140 tons, homeward bound from New Zealand, torpedoed by U.C.48 at 6 p.m. on March 224 in Lyme Bay on her way to London. It seems clear that the master had received route instructions at Plymouth on March 20 to keep close to the coast,5 except during the night if very dark, when an offing of five or six miles might be made. But the master (on April 6) denied having received these instructions. An enquiry held in April threw little light on the matter, though it led to a conference in June between the Ministry of Shipping and the Admiralty, on the desirability of ships calling at any other port than their port of unloading. The Prime Minister of New Zealand expressed much concern with regard to the circumstances under which the ship was sunk, 6 namely, that she had been allowed to leave Plymouth without an escort.

260. "Laforey" Mined, March 23.—A week after the loss of the Foyle another destroyer was mined, this time in the Dover area. On March 23 the Laforey (Lieutenant A. E. Durham), after escorting transports from Folkestone to Dieppe, was returning home with the Lark, Melpomene, and Laertes; she was going 21 knots on a course North when, at 4.28 p.m., in 50° 55½' N., 1° 27½' E., between Folkestone and Gris Nez, she struck a mine. There was a loud crash and all lights went out. Sub-Lieutenant Q. D. Graham was in the wardroom and, getting on deck, saw nothing beyond the middle funnel. He had just time to clear away a couple of lifebelts and go over the side when he saw the stern rise in the air and go down. The forepart was floating vertically about twenty feet out of the water, and sank some minutes later. The Commanding Officer and 57 men were lost, and only four officers and 14 men were saved by the Laertes and the Lark, which lowered boats and rafts in a considerable sea. It turned out that the destroyers were returning by direct route from Boulogne to Dover and were not following the swept Channel.7

¹ See S.232.

² H.S. 391/563.

³ H.S. 392/485.

⁴ H.S. 392/888.

⁵ H.S. 392/1261.

⁶ H.S. 393/156. Telegram to Commander-in-Chief, Nore, H.S. 406/273, 499. ⁷ Telegram, March 20, 1917, 2135.

⁸ H.S. 391/111, 162.

⁹ See S.238.

¹ H.S. 391/427.

² H.S. 391/705. Telegram, March 23, 1020.

³ She arrived Devonport safely March 27.

^{4 50° 17&#}x27; N., 3° 7' W.

⁵ Not too easy for a large ship at night.

⁶ M.65903/17, B.433/1917, Commander-in-Chief, Plymouth, May 1; M.64709 (Trade Division), Admiralty, April 12, 1917.

Ouestion 27, Commander, Laertes, Enquiry, March 24.

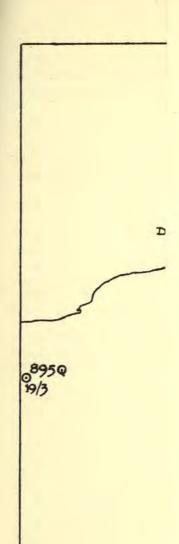
There was a question of the *Laforey* having possibly struck a mine which had been swept up and dumped, but it was more probably one of the six laid by *U.C.*16 on March 11 round about the Ridge. At a time when destroyers were badly wanted, and only a week after the loss of the *Foyle*, this second loss came as a nasty blow. (Plan 33.)

261. Milford and "U.C.65."-A prominent incident in the end of March was the mining of Liverpool and an attack on traffic in the Irish Sea.3 This area included three areas, Area XV, South of Wicklow, under the general orders of Vice-Admiral Sir Lewis Bayly, and the immediate orders of Vice-Admiral Charles Dare at Milford Haven; Area XVI, Kingstown to the Mull of Galloway, under Lieutenant-Commander C. H. Oxlade, R.N.R.; Area XXII, Holyhead, under Captain Herbert C. C. Da Costa, R.N.R. A previous attack on the Irish Sea, made between February 11 and 20, had already given rise to two letters written by Vice-Admiral Dare on February 18 and March 4.4 A line of net drifters had been stationed at the time from the Tuskar to the Smalls, but, from February 10 to February 14, on account of a fresh E.S.E. gale, they could not use their nets, and on February 18 Admiral Dare, in view of the small number of patrols, suggested that if it were definitely known that an enemy had passed the line of nets, shipping should be stopped until an escort of one armed trawler could be provided for every two merchant ships. Unarmed vessels were, meanwhile, to be diverted into Milford Haven by the drifters. As an alternative, he suggested the establishment of a definite trade route in the Irish Sea.⁵ Vice-Admiral Bayly did not concur in the stoppage of traffic; he thought it a better plan to order vessels to pass inside the Banks,6 though the navigation there was tricky, except in clear weather;7 Trade Division was also against stoppage of traffic except as a last resource, and an answer was sent on March 6 concurring with the proposal of Vice-Admiral, Queenstown. Vice-Admiral Dare had, however, already asked for the establishment of a fixed Trade Route from Tuskar to North Arklow with a proviso that in clear weather vessels should pass inside the Banks. The area was then being patrolled only by two yachts, which he considered quite inadequate to cope with hostile operations.8

¹ X.3518/1917. Vice-Admiral, Dover, March 27, 1917.

³ U.C.65, Lieutenant Commander Otto Steinbrinck.

7 M.O. 2024/17 in Box 1917, S.W.I.



 $^{^2}$ Field 334. O.U. 6020B. 50° 44·3′ N., is probably a misprint for 50° 54·3′; including the *Laforey's*, they were swept up round about 50° 54′ N. The mines laid by *U.C.72* on March 21 were discovered on March 24 (914Q)

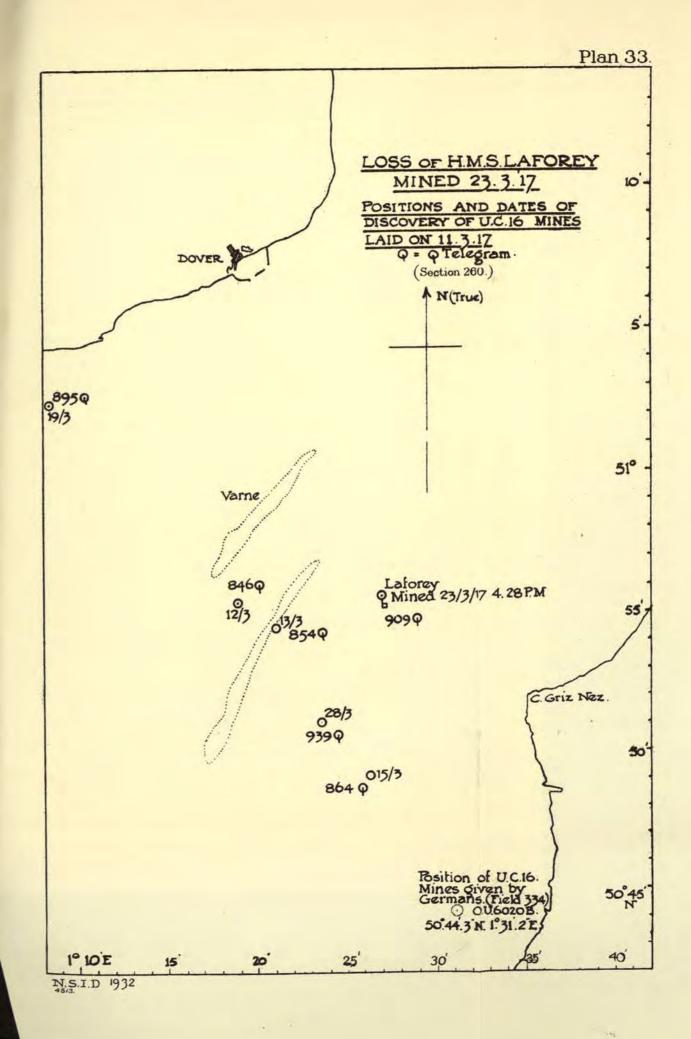
February 18, 1917, M.02042/17, and March 4, M.02641.
 Vice-Admiral Dare, February 18, 1917, H.S. 676/141, 207.

⁶ Kish and Arklow Banks (Chart 1824A). Navigation at night would not have been easy.

⁸ Vice-Admiral Dare, March 4, 1917, H.S. 676/207.

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⁷ M.O. 2024/17 in Box 1917, S.W.I.

⁸ Vice-Admiral Dare, March 4, 1917, H.S. 676/207.

The Admiralty did not favour this course, and on March 24 Vice-Admiral Dare was told that the then arrangement by which shipping might use either side of St. George's Channel, was to remain in force, but traffic would be diverted as necessary should occasion occur; the duty of diverting south-bound shipping was to be carried out by patrol vessels under Captain-in-Charge, Kingstown, and the S.N.O., Holyhead, and in the case of north-bound shipping, by vessels of the Milford Haven command. It may be doubted whether Vice-Admiral Dare at Milford Haven, found this course sufficient, for it meant that if a submarine was reported on the Irish coast, traffic was to be diverted to the English side, a procedure only possible in practice if submarine reports came in at once and orders to all ships could be instantly sent out. The answer had not been received when, on March 23, came a telegram to send six trawlers to help the Queenstown minesweepers to clear mines found off the Barrels1 (Ireland, South), a task which carried off six of his muchneeded patrol vessels, just when he needed them most. On March 25, however, in view of the sinkings of U.C.65, traffic in St. George's Channel was stopped2 and no more sinkings took place in the Irish Sea till March 28, the day after it was resumed. That same day four new P boats arrived at Milford to help the situation, which solved itself a couple of days later by U.C.65 going home.3

262. Liverpool closed, March 22-29.—An interesting issue of the attack in the Irish Sea was the closure of Liverpool, where U.C.65 laid mines on March 22. This was the first field laid in the Mersey. It was discovered by a steamer's sighting a floating mine on the morning of March 24, and the port was closed, 4 which meant holding up several "valuable" ships in Queenstown. On March 26 Liverpool was opened5 and the ships at Queenstown6 were hastened off on the 27th under escort of the Magic or Narwhal and two sloops. But U.C.65 laid another batch of mines that very night; the S.S. Kelvinhead ran on one and the port had to be closed again at 12.5 a.m. on March 28,7 which meant that the ships and their escort had to put into Milford Haven, as it was blowing hard on March 30 and no sweeping could be done on that day. There followed a further delay in the return of the escorts, which contributed in its turn to the loss of the horse transport S.S. Crispin,8 3,965 tons, on her way to Avonmouth; she had to be sent on without escorts-to be torpedoed by U.57 on March 29 at 7.15 p.m. off Waterford-demonstrating the

N3

¹ Laid by U.C.48, March 17, H.S. 391/863.

² March 25, 1917, 2006, H.S. 392/305, 749.

³ P.14, 36, 23, 18. H.S. 676/304.

⁴ Telegram, March 24, 1917, 1705. Also H.S.B. 170/496.

⁵ Telegram, March 27, 1917, 1255, at 8.13 p.m. H.S. 392/582.

⁶ Cassandra, Nessian, Adriatic, Manchester Corporation. H.S. 393/713.

⁷ H.S. 392/915, 393/651. ⁸ See S.227.

⁽C 4462)

influence of mines in the Mersey on traffic off the Irish Coast. The closure of Liverpool and the lack of escorts held up H.M.S. *Berwick* as well, which was waiting to get away with a big consignment of gold, and was still waiting on April 3.1

263. "Valuable Ships," March 29.—Running parallel with the patrol system, the principal task of destroyers in the south was the escort of "valuable" ships, and troop convoys. The number of valuable ships in March, for which Devonport had to supply an escort, seems to have been about two a day,2 and the escort met them usually at 15° W., i.e., some 450 miles from Devonport (36 hours at 12 knots). In addition, escorts had to be provided for men of war. Thus, on March 29, the Ariel, Goshawk, Archer, Acheron, and Lizard were returning from the escort of battleships of the Prince of Wales class to Portsmouth and Dover; the Archer and Attack were meeting valuable cargoes, leaving only the Hardy, Orestes and Porpoise "hunting" submarines, a task which really amounted merely to patrolling up and down, for the submarines were careful not to be seen. Very strong escorts were supplied for troop convoys. Thus, on March 24 seven destroyers went out to meet the Orcoma's convoy, and on March 29 the Calgarian, which left Halifax on March 28 with five ships and was due in 48° 20' N., 15° W., on April 4, was ordered to be met by six destroyers. The convoy finally arrived at Liverpool on April 7th, when the Lapland ended the journey by running on to one of U.C.65's mines, though she managed to get safely into port. Three other destroyers were escorting to Oueenstown the submarines recently sent to reinforce Admiral Bayly's force.

In the Channel there was the same pressure of daily incident, culminating on March 31 at 1 a.m., when a second hospital ship the Gloucester Castle, 7,999 tons, on the way from Havre to Southampton, was torpedoed half way across, in 50°11′N., 0°31′W.—the work of U.B.32. Her distress signals were seen by the Beaver, by P.19, escorting a transport, and the S.S. Karnak, who came hurrying to her aid. A nasty sea was running, but the Beaver got alongside and took off 65 patients and 30 men of the R.A.M.C. The Karnak took 43 wounded, two sisters and 48 crew out of the boats. The ship remained afloat, was got in tow by dockyard tugs and was beached in Stokes Bay. The Commander-in-Chief, Portsmouth, meanwhile stopped the sailings of hospital ships at 5.39 a.m., 3 while some five destroyers were in attendance almost the whole day, escorting her in. The demands for destroyers were so continuous and so urgent that the day before the Commander-in-Chief had

asked for "forethought" to be shown by the Trade Division in the sailing of vessels requiring escorts, pointing out that a Russian ice breaker¹ could have left the Tyne at the same time as the *Aurania* with the same escort.²

264. German Interception.—Room 40 and its deciphers remained a source of strength to the Admiralty, but in Germany, Neumünster was working on the same lines. On March 28 at 1916 a signal went out to all German submarines that two British destroyers would be waiting on March 29, 3 p.m. C.E.T., in about 57° Latitude. 11° Longitude, for an auxiliary English cruiser probably damaged, 3 This in its turn was intercepted,4 and on March 29 at 1920 the Admiralty asked the Commander-in-Chief for the text of any such signal and the codes in which it was made. It appeared that on March 27, 2104, the Senior Officer, 10th C.S., had sent a signal to the Commander-in-Chief by wireless, in cypher "S," transposed, to say that the Moldavia had fractured her rudder right across, and was steering by engines at 10 to 12 knots for Glasgow, requesting escort at 2 p.m., March 29, in 57° 10' N., 10° 48' W. In consequence, Commodore (F), on March 28 at 0058 by W/T, in cypher "S," transposed, had ordered the Grenville to send two destroyers of his force to proceed by the Minches to meet her at the named rendezvous.5 Apparently no German submarine was able to respond, and under an escort of four destroyers the Moldavia passed Tor Head (Ireland North East) at 5.40 a.m. on March 30, and got safely to the Clyde that afternoon. On March 21, too, the use of G.F. Code No. 3 with Vocabulary Signal Book No. 7 was forbidden, clearly indicating a measure of growing skill on the German side.6

265. Scillies Route Changed.—On March 29 came in reports showing that a submarine was working on the "Scillies to West" route. The British S.S. Glenogle was sunk on March 27 at 5.20 p.m., in 48° 20′ N., 12° W., and the British S.S. Cannizaro followed the next day, March 28, in 49° N., 10° W.; their reports came in with the survivors to Falmouth on March 29 and reached the Admiralty by 10 p.m.? It was presumably in view of this that the Scillies route was given a drastic shift to the southward. Ships were to cross 7° W., between 48° and 49° 30′ N., 10° W., between 45° and 48° N., and 17° W., between 43° N., and 47° N. Traffic was to be well spread between these limits 8

¹ H.S. 405/808.

² Between March 21 and 27 (six days) escort was ordered for at least 13 ships.

³ H.S. 393/938.

¹ The Svvatogor.

² Telegram, March 30, 1917, 1.43 a.m. H.S. 393/386.

³ War Diary, I.D. 3026, p. 101.

⁴ It evidently took some hours to decode.

⁵ H.S. 393/288, 385.

⁶ H.S.B. 145, 904Q, March 21, 1917.

⁷ H.S. 393/344, 339. The submarine was U.24, which had come down to this area on March 24.

⁸ H.S. 393/540. Telegram, March 30, 1917, 1402.

The message went out at 2.02 p.m. There were six ships from Gravesend on their way down Channel which had been given the old route, and Falmouth was told to communicate the change to them if possible. Unfortunately, one of them, the *Valacia*, 6,526 tons, on the way to Portland, Maine, was torpedoed off the Eddystone¹ the next day at 5.30 p.m., but was got into Plymouth with the help of two dockyard tugs.

266. North Sea, German Submarines, March.—In the North Sea the losses were comparatively small. The High Sea Fleet boats were working in the area north of Flamborough Head with mine and torpedo, while south of Flamborough Head the older boats of the Flanders Flotilla were dropping their usual cargoes off the Thames and Suffolk coast. A vigorous campaign, too, was directed against the route to Holland. The number operating in the month was:—

S/Ms. Days out.

High Sea Fleet (north of Flamborough) . . 15 117

Flanders (south of Flamborough) . . . 6 91

The figures of ships and tonnage sunk by submarines were:—

 By S/Ms.
 By Mines.

 High Sea Fleet
 ...
 26 (41,719 tons).
 6 (7,471 tons).

The average tonnage sunk per day was 1,345 tons, and as the average number of submarines operating was about five, the average sinkage per day per submarine may be estimated at 270 tons, or about one-third of the figures of the S.W. Approach.

The month opened on March 1 with the loss of the Italian S.S. Apollonia, 2,861 tons, going from Middlesbrough to Leghorn with munitions and coal. At 3.15 p.m., in 54° 10′ N., 0° 4′ W., about three miles north of Flamborough Head, she ran apparently on one of the mines laid by $U.C.32^2$ on January 31 and sank.

It was precisely to waylay these minelayers that a submarine patrol had been instituted in the Hoofden. To perform it on March 1 C.19 (Lieutenant Alan Bennett) from Harwich was off the Hinder at 9.55 p.m., in 51° 59′ N., 3° 23′ E., when he sighted a small submarine steering west (probably U.C.11 making for the Shipwash). There were challenges and a hail in German. It was 9.58 p.m.; the enemy fired star shell; C.19 replied with rifles, and fired a torpedo, which passed over the enemy as she went down.

C.3 was also patrolling off the N. Hinder and C.23 off Schouwen Bank, but neither saw anything. The principal weakness of these

small boats lay in the difficulty of navigation, which made it necessary for them to have a mark to keep station on, though they were well able to keep the sea on a four days' patrol.¹

In the north U.C.41, after laying mines off the Longstone (Farne Islands) on February 27, lay in wait off the coast, and on March 1, at 4.30 p.m., in 55° 54′ N., 1° 38′ W., stopped the British S.S. Tillycorthie, 382 tons, going from Seaham to Peterhead. After taking the Master prisoner and giving the boats a course for land, the ship was sunk by gunfire

267. March 3, "U.C.41," Lerwick Route, Loss of "E.49."—
U.C.41 evidently remained in the area, for on March 3, at 12.45 p.m.,
four miles E. by N. of Berwick, in 55° 48′ N., 1° 53′ W., she torpedoed
the Norwegian S.S. Ring, 998 tons, bound for the Charente with
nitrate of ammonia. No lives were lost. She had come across to
Lerwick in the company of three other Norwegian ships—the Gurre,
the Livingstone and the Ragnhild. The Gurre was torpedoed on
March 1; the Livingstone was captured and taken to Germany.
Three, therefore, out of four never reached port, a demonstration of
the circumstances which brought about the Scandinavian Convoy.

While U.C.41 was off Berwick that day, U.C.76 left Heligoland (March 3) on her way to Cromarty, where she laid mines on March 9, and then went on to the Shetlands.

There on March 10 she laid a minefield off Balta Sound, a little harbour in the extreme north of the Shetlands, 60° 45' N., 0° 47' W., which E.49 and G.13 had been using as a base since March 82 for patrolling off Muckle Flugga (north point of Shetlands). G.13 was fortunate and torpedoed U.C.43; E.49 met another fate. On March 12, at 12.55 p.m., she was seen by a coast patrol leaving Balta Sound, and passed out of sight behind the small Island of Huney, on the west side of the entrance. Suddenly a loud explosion was heard, and a column of smoke and water rose high behind the island. E.49 disappeared leaving only some sailors' caps and a grating floating on the water. She was located in 16 fathoms S.50 W., 23 cables from Balta Lighthouse, with her bows blown completely off.3 U.G.76 before laying her mines had met on March 9 at 7.25 p.m., five miles south of Sumburgh Head (south point, Shetlands), 59° 48' N., 1° 10' W., the Norwegian S.S. Dana, 560 tons; she was steering S.W. ½ S. under escort of an armed trawler, St. Louis, when U.C.76 sent her to the bottom with a torpedo.

268. March 5, "Copenhagen" Torpedoed.—We may turn to events in the south, where the Germans were making a vigorous

¹5 m. S. 19 E. from Eddystone, 50° 5' N., 4° 16' W., by U.59.

² In 54° 10' N., 0° 5' W.

¹ H.S.A. 273/285. Commodore (S) report.

² It looks as if the Germans had intercepted a signal about it, for no minefield had ever been laid there before.

³ M.11201/17 on X.1943/1917.

attack on the Hook of Holland route with their latest U.C. boats. On March 5, at 9.42 a.m., in 52° 9' N., 2° 54' E., U.C.61 torpedoed the Copenhagen, 2,570 tons, whose two destroyer escorts had dropped behind (see S. 198). She remained affoat for some hours, but fog and a heavy sea prevented any attempt at salvage. Her despatches and fifty-seven survivors were saved by the escorts: other survivors were picked up by Dutch craft, and only six lives were lost. The ordinary eastbound traffic, numbering some eighteen ships under an escort of five destroyers, got safely across. The Princess Melita, however, on reaching the Hook was told that on account of her defensive armament she must leave in half an hour, though she was allowed to remain long enough to take in water for a sick person. On her way across, a torpedo had been fired at her from the port side at 4.40 p.m. (March 5) in 52° 5' N., 3° 35' E., five miles from the Maas Light Vessel, and the conning tower and periscope of another submarine had been sighted on the starboard beam. She brought the latter astern, opened fire, and steering to ram the first seems to have hit it,2 for she felt a shock and heeled to starboard. The route for Dutch traffic was clearly growing dangerous, and it was altered some ten miles to the northward a few days later (March 9).3

It was to meet this situation that Commodore (S) was maintaining a submarine patrol, and C.19 was patrolling that same day (March 5) off the Maas, where at 2.30 a.m., in 52° 3′ N., 3° 17′ E., she sighted a small submarine steering N.N.E. This was probably U.C.11 just off on a trip to Southwold. A heavy sea was running. The Germans fired star shell; the range of 120 yards was too short for torpedo attack, and C.19 attempted to ram, passing over her as she went down.⁴

U.B.27 left Heligoland the same day (March 5) to work on the Hook of Holland route, and had some success. On March 11, at 6 p.m., on 51° 54′ N., 2° 58′ E., she torpedoed the Norwegian S.S. Thode Fagellund, 4,352 tons.

In the north U.C.55 had laid mines off the entrance to Kirkwall, and at 6.30 a.m., on March 9, two miles from Hellier Holm, the destroyer Albacore (Scapa, local defence) struck one, which blew the whole of her fore part away and killed eighteen men, but she remained afloat and was brought safely in. The next day (March 10) at 8.54 p.m., came in the news of G.13 having sunk U.C.43 off

Muckle Flugga, and on March 11, in view of this conspicuous success, Captains (S) at Blyth and Tees were told to send two more "G" or "E" class to Scapa.¹

269. Mines off Aldeburgh, March 11.—On March 11, U.C.4, a Flanders boat, laid twelve mines off Aldeburgh Napes in 52° 6′ N., 1° 42′ E.

The British S.S. Kwasind, 2,211 tons, was proceeding up the coast bound from Bilbao to Hartlepool with iron ore. At 8.45 a.m. she was in 52° 8' N., 1° 45' E.2 following the War Channel Buoys, in clear weather when she saw a mine ahead. There was a violent explosion; the ship sank in ten seconds; 10 were saved and 12 were lost. The information reached Lowestoft before 11 a.m., and the Admiralty at 2.4 p.m., March 11. The next day two more ships were blown up close to the same spot. It was 6 a.m. on Monday, March 12. The Ambient, a small tramp of 1.517 tons, with 2,000 tons of coal to Dunkirk, got under way from Corton (Yarmouth). She was off Aldeburgh Napes in 52° 84' N., 1° 46' E., at 8.40 a.m. when she struck a mine and sank in six minutes.3 Just behind her was the British S.S. Pontypridd, another tramp, of 1,555 tons, with 2,000 tons of coal from Tyne to London. She saw the Ambient blow up and was going to help her when she herself struck a mine; the deck fell in imprisoning three men on the fo'csle. She sank in sixteen minutes and nothing more was seen of the three men.4

The submarines were wary and attacks on them were few. On March 12, away up in the north in 58° 22′ N., 1° 45′ W., about 40 miles south-east of Scapa, the armed trawler *Chrysea*, at 11.5 a.m., sighted a submarine about two miles off, opened fire, drove it down and thought her third round a hit. This may have been *U*.80 on her way home after laying mines off Swarback Minn (7th), Stornoway (9th) and the Orkneys (12th).

270. March 12, "Skate" Torpedoed.—In the south, on March 12, the submarines attacking the Hook to Holland route, were able to register a success. The Skate (Commander John Hodgson) had sailed at 5.50 a.m. with four destroyers to escort the eastbound traffic numbering eleven ships. She saw the traffic in and then proceeded to the Maas to look for the other destroyers. Though the weather was thick they had already seen something. At 2.40 p.m., about

¹ H.S. 247/85; 387/84.

² I.D., Vol. 840, Attacks on Submarines; the submarine was not sunk. *U.C.*61's prisoners (stranded Wessant 26/7/17) reported that she sustained serious damage in a voyage in March; forced to dive to 197 feet, she took in water and had to come up at a sharp angle; she was driven down again at a steep angle by the fire of a "sloop"; the water fused the motors, rendering them useless and she had to return to Zeebrugge. I.D. Vol. 589/87. This was probably on her second cruise, March 17–22.

³ H.S. 387/758, 917. ⁴ H.S.A. 273/259.

¹ H.S. 388/308.

² 7 m. E. by N. from Orfordness. H.S. 388/444.

³ M 63191/17

⁴ Lowestoft reported the Ambient and Pontypridd as probably torpedoed, H.S.388/683. In British Vessels Captured or Destroyed, the Kwasind (p. 36) is stated to have been mined off Southwold. Apparently no Q telegram was issued. Four mines were swept up by March 12, 4.30 p.m. H.S. 388/825.
⁵ O.U. 6020A, Fields 118a to 122a.

five miles north of the Maas, the Lennox, which had dropped astern to sink a mine sighted a submarine (it was U.B.10) on the surface and closed it challenging. It went down and the Lennox dropped two depth charges, only one of which exploded. The Skate was still cruising about off the Maas at 20 knots. At 3.30 p.m. she was two miles north of it and had just altered course to N.E. when a torpedo was seen coming on the port quarter. It struck her and blew off the after compartment. The Lennox heard the explosion and coming down with the Lawford took her in tow. A signal for assistance was sent and Captain R. G. Rowley-Conwy, in the Nimrod, who was meeting the westgoing traffic, was ordered by Commodore (T) to concentrate off the Maas in case the Zeebrugge destroyers came out.² They did not move and the Skate was got safely in.³ U.B.10 was damaged by the depth charge and had to return.

Another German submarine, U.B.16, had a narrow escape. Commodore Waistell had four submarines—C.4, C.16, C.21 and C.25—out between March 10 and 14, watching for submarines off the Dutch coast. On March 12 C.21 heard the explosion of the Lennox's depth charge and a quarter of an hour later about 2.55 p.m., in 52° 5′ N., 3° 15′ E., sighted a submarine but had to submerge on account of the approach of the British destroyers. At 8.45 p.m., in 52° 6′ N., 3° 17′ E., she again sighted the German submarine on the surface apparently stopped only a couple of hundred yards away. There was no time to fire and C.21 ran close past her challenging and with both tubes at the ready prepared to ram or torpedo her, but in the darkness of the night she disappeared.

271. "U.B.6" Stranded, March 13.—The German success was discounted the next day by the loss of one of their small "U.B." boats, which ran aground on the Dutch coast on the Hinder Ribben shoal, a near Hellevoetsluis, and was interned by the Dutch.

The British submarines, too, were keeping a sharp look-out. On March 13, at 6 a.m., C.16 was patrolling in 52° 1′ N., 2° 53′ E., when she sighted an enemy submarine⁵ on the surface three miles off steering S.W. She dived to cut the German off, but at 10 a.m. destroyer smoke on the horizon drove the enemy down.⁶ At 3.45 p.m., C.21 was in 52° 26′ N., 4° 20′ E., off the Dutch coast, when she sighted a large German submarine⁷ and attacked her unsuccessfully. This was U.C.71, which was lying off Ymuiden at the time waiting for Dutch traffic.⁸

Comm. (T)'s system of convoy, however, was too strong for the German attack. During the month 56 ships passed eastward and 41 westward—a total of 97 without mishap. The only escorted ship sunk was the *Copenhagen* (March 5), in which case the escorts had fallen behind in a heavy sea. The four other ships¹ sunk on the route were neutral and were not under convoy.

U.C.50 and U.C.29 were working at this time in the latitude of the Forth. On March 13, at 9 a.m., U.C.50, in 56° N., 4° 57′ E. (250 miles east of Forth) met the Dutch S.S. La Campine, 2,557 tons, Rotterdam to New York, and sank her with gunfire in a position which, if correctly given, was at least eight miles outside the German Barred Zone. E.46 picked up the boats thirty-two hours later and towed them for three hours till she was able to transfer them to a Norwegian S.S. Norden.

U.C.29 was working close to the Scottish coast. She had laid mines off the Tay on March 9 and on March 14 sank the Norwegian S.S. Storaas, 3,107 tons, in about 57° N., 2° E.² U.B.27 was still busy on the Dutch route, and the same day (March 14), in 52° 3′ N., 2° 5′ N., sank another large ship, the Norwegian S.S. Davanger, 3,960 tons, which was not under convoy.

272. "Q.23" Action, March 15.—Since March 2 a small decoy ship, the Result, Q.23 (Lieutenant Philip J. Mack, R.N.) attached to Lowestoft, had been cruising on the East Coast. She was a small schooner of 122 tons, with an auxiliary motor, armed with two 12 pdrs., and two 14 inch tubes and disguised as a Swede. On March 15, at 7 a.m., she was some 60 miles east of Flamborough Head, in 54° 19' N., 1° 45' E., steering E.S.E., when she sighted a submarine astern, 2½ miles away. There was a strong wind blowing from North with a rising sea. The submarine opened fire at 7.5 a.m., Lieutenant Mack hove the ship to and sent the panic party away, but as the submarine would not come closer than 1,000 yards and kept up a steady fire, Lieutenant Mack opened fire at 7.40 a.m., and got off two rounds from the 12 pdrs., and one from the 6 pdr., before the submarine4 went down.

The first 12 pdr. round appeared to hit. An hour or so later, at 8.40 a.m., he again sighted a submarine which at 8.50 a.m. fired a torpedo which missed him astern. The ship and sails had been hit in several places and Lieutenant Mack received a mention in the Gazette⁵ for his action. The report showed that Commodore (S) had

¹ H.S. 247/93.

^{2 52° 4′} N., 3° 53′ E.

³ H.S. 388/351. The submarine was U.C.69. H.S./Q.28.

⁴ Com. T., March 15, M.11047/17 in X.2291/1917.

^{5 51° 49&#}x27; N., 3° 59' E.

⁶ Possibly U.C.14 on her way to lay mines off Lowestoft.

⁷ H.S.A.273/327.

⁸ I.D. 3026, Signal 1745 M.E.T.

¹ Thode Fagelund (11th), Davanger (14th), Hestia (30th).

² No details, E.1 Log, March 20, 5.

³ No particulars.

⁴ Not identified. U.B.22 is shown in this area in I.D. Chart on March 13, but Marine-Archiv gives March 16 as her date of sailing.

⁵ M.03823/17 in 13243/1917.

apparently not been kept informed of Q.23's movements and Commodore Ellison (Lowestoft) was instructed to consult with him in future.

273. H.M.S. "Motagua" Mined March 16.—Up in the North, U.80, one of the clumsy big minelayers, had sown mines on March 7 off Swarbacks Minn,1 the base of the Tenth C.S. A trawler minesweeper had found three of them on March 12 and the information had gone out. On March 14, too, a heavy explosion had been heard and the Senior Naval Officer. 2 Rear-Admiral W. B. Fawckner, thought that ships should not enter till the channel had been swept. 8 The Motagua and Changuinola who were then on their way returning to harbour, were accordingly told to stand on and off during the night. On March 15 the entrance was considered clear and the Changuinola got safely in. Not so the Motagua (Captain Laurence L. Dundas). At 3.8 a.m., on March 16, some six miles from the entrance in 60° 22' N., 1° 41½' W., a mine exploded under her starboard bow.4 It was very dark. The compass was disabled and the rudder useless, but the ship could steam, and at 2.55 a.m. reached the entrance to the anchorage and by 6.5 a.m. was safe inside the boom. At a Court of Enquiry held on April 4 1917 the officers and men were exonerated from blame.5 It was decided on March 19 to institute a swept channel and as there were only seven minesweepers attached to the port, three of the patrol drifters at Swarbacks Minn were fitted out as minesweepers for this work.6

was crawling disabled into Swarbacks Minn, U.C.50 was laying mines off Coquet Island. She remained off the Farne Islands and the next day (March 17) at 0700 met a small Norwegian S.S. Expedit, 680 tons, going from Fraserburgh to Hull and sank her by gunfire. Then she proceeded south to lay mines off Blyth (three) and off the Tyne (three) on March 19. It was on one of these latter that the British S.S. Rio Colorado, 3,565 tons, ran. She had come from Monte Video, and arriving off the Tyne on March 21 at 8 p.m., was waiting for dawn for the port to open. The morning was stormy; she was coming in at 5.45 a.m., when she struck a mine and broke in two amidships. The chief mate, boatswain and two seamen were blown up. The second engineer and three firemen were lost. The pilot and nineteen men were saved by the examination vessel.

275. March 18, "U.C.45," Kinnaird Head.—On March 18, U.C.45 had laid mines off Kinnaird Head and on March 19 at 0635, some 20 miles to the eastward, in 57° 45' N., 1° 8' W., torpedoed the Norwegian S.S. Pollux, 1,196 tons, on her way from Newcastle to Bergen. On March 21 an American tanker, Healdton, 4,489 tons, from Philadelphia to Rotterdam, was torpedoed at 8.15 p.m., in 53° 38' N., 4° 22' E., and went to the bottom with a loss of 20 men drowned, though the position given was well to the eastward of Terschelling L.V., and some 10 miles outside the blockade line between Terschelling and Udsire.1 U.C.45 was still off Scotland East and on March 22 sank two small ships—at 9 a.m., by gunfire, the Norwegian S.S. Egenaes, 399 tons, from Bergen to Peterhead, and at 4.45 p.m., about six miles from Aberdeen, the Norwegian S.S. Susanna, 442 tons, from Norway to Hull. A high sea was running and apparently some of the crew were lost.2 The next day (March 23) at 6 a.m., off Kinnaird Head, in 57° 40' N., 1° 20' W., she met the Norwegian S.S. Blomvaag, 695 tons, going from Leith to Bergen, and sank her with gunfire and bombs. H.M.S. Sylvia, hearing the gunfire, came on the scene and sent the submarine down. The Sylvia's appearance was not entirely forfuitous. She was one of nine destroyers in the Orkney Local Defence under Vice-Admiral Sir Frederick Brock, Commanding Orkneys and Shetlands, who was in favour of all vessels being escorted "to the largest possible extent."3 The Sylvia (Lieutenant Peter Shaw, R.N.R.) had accordingly started escorting ships from Lerwick on February 17 and found that a convoy was the best hunting ground for submarines. On May 204, May 29 and June 5, when doing escort work, she found an opportunity for attack with depth charges, and on September 29 finally achieved a striking success by sending U.C.55 to the bottom.

275A. "U.C.77" and "U.C.75," Scotland, East.—On March 24, U.C.77 arrived off the Scottish coast to relieve U.C.45; she laid mines off May Island and at 3 p.m., off St. Abbs Head, sank with gunfire and bombs, a Norwegian S.S. Grenmar, 1,438 tons, bound for Christiania. The next day (25th) she laid mines off Aberdeen. Working in the same vicinity was U.C.75 which had sailed from Heligoland on March 22; off Sunderland on March 23, at 3.35 p.m.,

¹ St. Magnus Bay, Shetlands, West.

² H.M.S. Gibraltar.

³ H.S. 388/796, 299/125.

⁴ In H.S. 389/701 an intercept from *Motagua* stated she had been struck by a torpedo forward, 0030, 60° 42′ N., 2° 48′ W. This looks like a mutilated version of the *Motagua's* signal.

⁵ Papers titled X.7625/17, in H.S.1278/147.

⁶ X.8290/17. 7 M.63909/17.

U.C.50, on her way home by then, on March 20, at noon, in 56° 30′ N., 2° 40′ E., half way across the North Sea, met the Norwegian S.S. Frisk, 1,038 tons, on her way to Norway, and sank her with bombs. An easterly gale was blowing with driving snow.

¹ Submarine not known.

Exact details of survivors are lacking in many cases of neutral ships.
 Letter, February 25, 1917, asking for 6 more destroyers and 12 whalers

M.02504/17 (X.5830/17) 4 M.06572/17 (X.13102/17).

in 54° 20' N., 0° 15' W., a torpedo had missed the British S.S. Genessee, 2,893 tons, on her way to the Forth; on March 25, at 8.50 a.m., 25 miles East of Peterhead, U.C.75 sank with gunfire the Norwegian S.S. Marshall, 1,123 tons,1 and three fishing vessels; then moved south for at 9.30 a.m., in 57° 12' N., 1° 30' W., she sank a trawler, the Prince of Wales. Her further efforts were foiled by the A.T. Commissioner (Lieutenant Frank W. Charles, R.N.R.) which had come out to cruise with the Granton fishing fleet that very day. She was in 57° 15' N., 0° 7' W., when at 3 p.m., the trawlers were seen raising their trawls in a great hurry, but were ordered by the Commissioner to "carry on." At 6.45 p.m., two trawlers were seen coming up with a submarine chasing them. The Commissioner went on trawling, then, as the submarine passed 500 yards off, cut away her gear and opened fire with a 12 pdr. The first shot missed, the second and third seemed to hit. Down went the submarine, followed by the Commissioner's depth charge which failed to explode. Her action, though it did not seriously damage the submarine, saved the fishing fleet from being sunk and Lieutenant Charles received a D.S.O., and his trawler an award of £200.2 U.C.77, meanwhile, remained on the coast, though two days elapsed before she got another ship. On March 27, at 10 a.m., 18 miles south of Girdleness, in 56° 55' N., 49' 1° W., she met the Norwegian S.S. Nova, 1,034 tons, proceeding independently from Blyth to Sarpsborg, and sank her with gunfire in a heavy sea. At 11.40 a.m., in 57° 1' N., 1° 54' W., seven miles from land, she met the Norwegian S.S. Sandvik, 591 tons, from Goole to Gothenburg, and sank her with gunfire, capturing 296 bags of mail. The crew of 14 took to the boats and were all picked up. She then moved to the south, and on March 28, at 6.35 a.m., in 56° 15' N., 1° 40' W., met another Norwegian S.S. Tizona, 1,021 tons, from London to Christiania, and sank her with gunfire and bombs. With the exception of two more fishing vessels this was U.C.77's last ship and she was back on April 4.

276. March 28, North Sea.—Up in the north that day (March 28) U.C.42 was working between Kirkwall and Norway and at 8.30 p.m., in 58° 57′ N., 2° 21′ W., torpedoed the Norwegian S.S. Urania, 1,688 tons, on the way from Kirkwall to Norway, killing seven men, including the master and mate.

In the Wear, when leaving Sunderland at 3 p.m., the tug *Hero*, 66 tons, which was apparently outside the swept channel, blew up on a mine laid by *U.C.*40, on March 18, and sank in six minutes.

Further south, on March 28, the British S.S. Oakwell, 248 tons, laden with bottles for London, was blown up in Robin Hood Bay, in 54° 29′ N., 0° 28½′ W., at 11.20 a.m. The whole of the after

part of the ship was blown away and she sank in three minutes¹ with a loss of four lives. The next day (March 29) close to the same spot, another ship, the British S.S. Kathleen Lily, 521 tons, going to Boulogne with 500 tons of coke, was blown up at 2.45 p.m., a couple of miles to the southward in 54° 27½′ N., 0° 28′ W. She sank in ten minutes and the loss was attributed to a mine, though none had been found in the vicinity.² U.B.21 was off Scarborough that day (March 29) some ten miles to the southward and at 1.45 p.m., three miles E.S.E.³ of Scarborough, in 54° 17′ N., 0° 18′ W., sent a torpedo into the British S.S. Bywell, 1,522 tons, bound for Rouen with 2,050 tons of coal. The ship was completely wrecked amidships and a second torpedo sent her to the bottom. The periscope of a submarine was seen by the crew who were picked up by the A.T. Schipperke (Humber) half an hour later.

Twenty miles to the north at 8.45 p.m. (March 29), in 54° 36′ N., 0° 36′ W., the Belgian S.S. Schaldis, 1,241 tons, on the way from the Tyne to Calais, was torpedoed⁴ without warning, six miles N.N.E. of Whitby.

Two patrol vessels were visible on the quarter, about a mile off. The ship sank in one minute with a loss of one drowned. On March 30, the Dutch S.S. Hestia, of 958 tons, was torpedoed and sunk off the Hook of Holland with the loss of seven Dutchmen and seven Chinamen. Finally, on March 31, the Norwegian S.S. Feistein, 2,911 tons, from Philadelphia to Rotterdam, carrying grain for the Belgian Relief Commission, was sunk at 2 a.m., seven miles N.E. by E. ½ E. of Terschelling, her loss being attributed to a mine.

277. Scandinavian Convoy, March 30.—The preponderance of Norwegian losses in the North Sea was very marked and caused grave anxiety in Norway. During the month twenty-seven Norwegian ships of 27,769 tons were lost. A close watch was kept by the Germans on Norwegian sailings, and on March 25 the Admiralty intercepted a signal from Bruges to submarines saying that sixteen steamers were leaving Bergen on the afternoon of March 26.5

The Commander-in-Chief was thereupon informed that an attack was expected, and was requested to report his arrangements for the protection of the Bergen-Lerwick route. In reply, he stated that the

¹ No particulars.

² M.03817/17, C.-in-C., Rosyth, X.13094/1917.

¹ Attributed to a mine, but *U.B.22* reported sinking a ship of 3,500 tons in Robin Hood Bay on March 28. *U.C.*31 had, however, laid mines in 54° 28′ N., 0° 29′ W., on February 25. O.U. 6020A. Field 54.

² Attributed to a mine, M.64208/17.

³ Master's deposition in M.64207/17. Merchant Vessels Sunk (p. 40) gives East

⁴ U.54 gives her name in her list, but gives the date wrongly as April 1. It was probably U.B.21.

⁵ War Diary, I.D. 3026, p. 94.

Vice-Admiral Orkneys and Shetlands escorted vessels from Lerwick to 1° 30' E.1 and brought back westbound vessels.2 He proposed that when an attack was probable sailings from Norway should be held up. His reply came in at 10.36 p.m., and the next morning (March 27) was reinforced by a cable from Sir M. Findlay, Christiania, to say that Norwegians were losing confidence in the route, as they never saw British men-of-war on it except near the naval ports.3 Submarines had been specially active on the east coast of Scotland, and the Commander-in-Chief, Rosyth, was asked to consider the question of routes between the Farn Islands and Kinnaird Head.4 Instructions were issued at the same time for arrivals at Lerwick to be telegraphed to Admiralty, and for the Naval Consul at Bergen to report all sailings to Lerwick,5 though Sir M. Findlay thought that vessels from other ports should not call at Bergen but sail for Lerwick direct. The Commander-in-Chief, however, replied that he thought vessels must first make a rendezvous where they could be picked up by the escort.6 He pointed out that traffic arrangements on the east coast were under Commander-in-Chief, Rosyth, and the Rear-Admiral Commanding East Coast and not under the Grand Fleet, though four Grand Fleet destroyers had been sent to supplement local patrols at Peterhead.7 At this point the Trade Division proposed that neutral vessels trading in Allied interests should proceed up the east coast, and after passing the Moray Firth steer direct to Lerwick from Noss Head (Sutherlandshire). The Commander-in-Chief concurred, but added that effective protection necessitated escorts and should be regulated under one central authority. As it was impossible to

The execution of these proposals was hindered for a couple of days by heavy weather, but as soon as it moderated Admiral Brock arranged for a number of vessels at Lerwick to be escorted to Peterhead, where the Commander-in-Chief, Rosyth, was to pick them up.¹⁰

escort individual ships a system of convoy was essential. He

suggested that the Vice-Admiral, Longhope,8 should control

This was the beginning of the Scandinavian Convoy, and in view of its complexity the Commander-in-Chief, on March 30, suggested

1 i.e., about 60 miles to the eastward.

2 H.S. 392/596.

movements.9

6 H.S. 392/784, 840.

a conference between Admiral, Longhope, and representatives of the Admiralty, Commander-in-Chief, Rosyth, and Rear-Admiral, East Coast, to formulate a definite scheme of protection.¹

277A. Loss of Drifter "Forward III."—The last loss of the month occurred off the Thames. U.C.1 had laid her mines on March 31 some 12 miles N.E. of the Sunk. The little drifter (Skipper James Mitchell) was working hard that forenoon with La Parisienne to sweep them up. At 1.20 p.m. in 51° 57′ 30 N., 1° 47′½ E., an explosion occurred and the little drifter disappeared. The Parisienne launched a boat, but "no such thing as one body was ever seen." She was a complete loss. Nothing was recovered but a set of charts and a solitary lifebelt. The Forward had gone in an instant with her gallant skipper and all her crew. She was small, but her work and that of all minesweepers was of great consequence, and these little losses are worthy of mention because so rarely mentioned.²

CHAPTER XIV.

APRIL, 1917.

278. Scandinavian Convoy.—On February 13³ the Commander-in-Chief had been told that the arrangements laid down in Admiralty letter of December 15, M.010677, were to be brought into force forthwith. Their nature has already been explained. They provided for traffic crossing from Bergen in the dark and being met at daylight 50 miles from Lerwick by an escort of armed trawlers.⁴ The telegram contained, however, an important qualification. Paragraphs 1 and 2 were not to come into force till information was received from H.M. Consul at Bergen as to the date on which Norwegian vessels would begin to require "the further instructions contemplated." As these paragraphs really comprised the arrangements for the Lerwick to Bergen route, their exclusion was a considerable one.

On the Norwegian side the Consul had apparently not been sent the "further instructions contemplated," and was apparently still waiting for them to arrive by the new Vice-Consul (who did not arrive till April 1). This situation continued right up to April.⁵

³ Telegram received 8 a.m., March 27, 1917. H.S. 392/640.

⁴ Telegram, March 26, 1917, 4.50 p.m., 392/527.

⁵ H.S. 392/707, March 27, 1917, 1248.

⁷ March 28, 1917, H.S. 392/1096.

⁸ That is Vice-Admiral Sir Frederick Brock, Vice-Admiral, O. and S.

March 28, 1917, 8.30 p.m., H.S. 392/1243.
 March 30, 1917, 11.35 a.m., H.S. 393/484.

¹ March 30, 1917, 11.43 p.m., H.S. 393/490.

² M. 11404/17, Report of Enquiry.

³ Telegram, February 13, 0325 in H.S.358/790. See S.54,130.

⁴ B. of T., September 25, 1916, 190, 198.

⁵ "The whole question is now waiting for the appointment of the Officer to Bergen which is urgently required." D.T.D. January 22, 1917 (B. of T. September 25, 1916, 266, 262). "It is essential that the Officer should be appointed quickly." C.O.S. December 31, 1916, Idem, 247.

Admiral Brock, however, set to work to escort the traffic eastward, and in the week ending February 24 sent off seven ships to a position (60° N., 0° 30′ E.) 50 miles true from Bard Head (Shetlands), escorted by his own armed trawlers and a couple of destroyers (see s.84a and 84b).

The first escort for westward-bound ships came on February 28, and was not very fortunate. On February 27 came word from the Admiralty to the Commander-in-Chief that the Norwegian ships Ring and Ragnhild, laden with nitrates, were leaving Bergen that night to pass Holmengraa at midnight. Now Holmengraa is an island on the Norwegian coast, and it was clear that they were leaving the coast, not according to instructions at dusk, but at midnight, which meant they would be over 40 miles from the rendezvous at daylight. The Commander-in-Chief, therefore, replied that unless they would leave the coast at dusk in accordance with his suggestion, it would be most difficult to afford them efficient protection.

His warning was fully confirmed, though what precisely happened still remains uncertain owing to a confusion of dates in the reports. The destroyers *Leopard* and *Locust* (Orkneys, Local Defence) were sent out by Admiral, O. and S., to meet them, leaving Scapa at 11 a.m. on February 28th.² The master of the *Ring* stated³ quite definitely that he left Holmengraa on February 27 with the *Ragnhild* and two other Norwegian vessels, the *Gurre* (1,733 tons) and *Livingstone* (1,005 tons).

He sighted two destroyers, which passed him and went on to the "other three ships." The Ragnhild was brought safely in. All the rest were lost. U.66 was working on the route, and at 9.35 a.m., somewhere about 60° 3′ N., 1° 10′ E., some 12 miles east of the rendezvous, torpedoed the Gurre, which broke in two and sank with the loss of all her crew and passengers except three. She then chased the British S.S. Birchgrove⁵ (1,795 tons), which engaged her with her 12-pdr. gun, and got away. At 11.30 a.m. she captured the Norwegian S.S. Livingstone, and took her back to Cuxhaven as a prize. The Ring went on, only to be torpedoed off Berwick on March 3, 4 miles from the coast. The dates are uncertain, but what is certain is that out of three ships that left Norway, all were sunk or captured without any help from a patrol.

There was one consolation. This was the worst that happened on the Lerwick-Bergen route, and was, in fact, the only loss there in March out of 37 ships escorted eastward and four to the northward.

The other routes suffered more heavily, and out of 29 Norwegian ships lost in the North Sea—a bad tale of losses amounting probably to about 10 per cent. of sailings for the month¹—seven were sunk off Peterhead and three between Lerwick and Peterhead.

All through February and the first week of March there was no escort for westward sailings, which was apparently waiting for the arrival of the Naval Vice-Consul² at Bergen, but on March 26 there came an alarm.

The Admiralty had taken in a German signal the day before from Bruges to "all ships" that 16 ships were leaving Bergen in the afternoon of March 26, and told the Commander-in-Chief that a determined attack might be expected, asking him at the same time what arrangements were in force. This went to Admiral Sir Frederick Brock, who stated that as no definite information had been received that routes A and B (i.e., of C.-in-C.'s of December 9 and A.L. December 15) were to come into force he had given orders that all traffic was to proceed through 60° 30′ N., 1° 30′ E.³

Sir M. Findlay at Christiania joined in with a cable the same day. He reported that the Norwegians were losing confidence, and were showing a tendency to choose their own route. It was the stretch from Lerwick to Peterhead that they regarded as most dangerous. He asked for a definite assurance that the route was, in fact, protected, and urged the expediency of letting Norwegians see that this was the case.

On March 28, the Admiralty wired this to the Commander-in-Chief, who replied that it was not possible to escort traffic further and "that the arrangements so far had worked satisfactorily"; four destroyers had been sent to Peterhead to reinforce the local patrols, but the traffic arrangements on the east coast were outside his jurisdiction.

The same day (March 28) Admiral Sir Frederick Brock pointed out that as the days lengthened traffic would require to be escorted further, and suggested four more rendezvous.⁵

Later in the day came another Admiralty wire suggesting that neutral vessels going up the east coast⁶ should steer direct to Lerwick from Noss Head (near Wick). The Commander-in-Chief concurred,

¹ H.S.362/946, 967.

² Leopard's Log.

³ I.D. Vol. 635, Home Waters, Ships Attacked.

⁴ To be sunk in convoy off the Tyne two months later, April 27, by U.C. 29.

⁵ The Birchgrove gives the date as March 1.

¹ The figures at Lerwick for the fortnight, April 29-May 12, were—To Scandinavia 63, From Scandinavia 75, Total 138, or 276 a month. M.04273, p. 75.

p. 75.
 2 "Proceeding by Vulture on March 29." H.S.A.102/46, H.S.392/1016.
 3 This new position first came into force on March 28, 1917. It was 20 miles N.E. of the old "50 miles east true from Bard Head" and took the eastgoing traffic further to the eastward. H.S.522/200.

⁴ Five Norwegian ships had been sunk in the Peterhead area by *U.C.45* between March 19 to 25, during which period ships had been escorted from the Orkneys to Peterhead in safety (H.S.522/174) in "ones" and "twos."

⁵ V.A. O. & S. to Commander-in-Chief, March 28, in H.S.A.102/48. The rendezvous then in use was 60° 40′ N. 1° 30′ E.

⁶ i.e., unescorted.

and added something much more urgent, namely, that "effective protection for traffic on East Coast will necessitate escorts, and should be regulated under one central authority, embracing the areas under R.A., Immingham (England East), Commander-in-Chief, Rosyth (Scotland East), and Admiral at Longhope (Orkneys)." "It is manifestly impossible," said the Commander-in-Chief, "to escort individual ships and, therefore, a system of convoy is essential." As the "principal junction" was Lerwick, he suggested that the Admiral, Longhope, should control the movements and time table of convoys.²

It was time for the whole business to be put on a firmer footing, and, with the concurrence of the Commander-in-Chief, Admiral Brock called a conference at Longhope to do it.

279. Longhope Conference,³ March 30.—The Longhope Conference met on March 30, 1917, under Vice-Admiral Sir Frederick Brock.⁴ There were present Commander Percy R. Stevens, for the Commander-in-Chief, and Commander Hubert G. Alston, R.N., Retd., S.N.O., Lerwick.

Another important member was Captain Arthur Halsey, appointed H.M. Vice-Consul at Bergen, who stopped at Kirkwall for two days on his way thither.

Important modifications of the existing arrangements were suggested. It was decided that all shipping should enter and leave the Norwegian coast only between 61° 10′ N. and 59° 50′ N., and should pass through certain specified rendezvous, to be allotted by the V.A., O. and S. These were:—

" P "	115 16	IDT IN	Diam'r	61°	6'	N.,	00	56'	E.		
" Q "	STATE OF	DW. JEW	0.	60°	54'	N.,	00	56'	E.		
" R "		gas In	45	60°	51'	N.,	10	18'	E.		
"S"	IDD I N	TIDOV IN	· .	60°	45'	N.,	10	50'	E.		
"T"		OUT THE		60°	31'	N.,	10	45'	E.		
" U "		raively)		60°	18'	N.,	1°	30'	E.		
" V "	neolië li	1221 10	36511	60°	11'	N.,	10	50'	E.		
"W"	1	Convest	20	60°	3'	N.,	2°	17'	E.	100	

These rendezvous were to be altered at intervals of three to ten days. (Plan 35.)

Eastbound vessels would leave Lerwick daily at 9 a.m., escorted by two whalers and two armed trawlers, proceed direct to the allotted rendezvous, then disperse so as to arrive on the Norwegian coast at daylight. Westbound vessels would leave the Norwegian coast daily so as to arrive at the rendezvous at 6 a.m. There an escort of two whalers and two trawlers, reinforced when circumstances would permit by a destroyer, would bring them to Lerwick.

The S.N.O., Lerwick, was to inform the Admiralty of all vessels leaving Lerwick; the V.A., O. and S., was to inform the Naval Vice-Consul, Bergen, who in his turn would send details of all ships leaving Bergen and Norway.

280. Longhope Conference, April 4.—But this first conference was purely local, and did not touch the East Coast, and on March 30 the Commander-in-Chief, in view of the complexity of the arrangements, suggested a conference with representatives of the R.A., Immingham, and of the Commander-in-Chief, Rosyth, to formulate a definite scheme of protection.¹

This was approved, and it met on April 4, under Admiral Sir Frederick Brock. Representatives of all the commands² concerned attended, with the Chief of Staff, Rear-Admiral Osmond de B. Brock on behalf of the Commander-in-Chief.

The really important question at issue was whether a convoy system was preferable to a "continuous stream of traffic." The conference was "practically unanimous" in favour of the convoy system and of basing the escorts for the East Coast on Immingham. The average daily number of vessels in each direction was estimated by the Trade Division at 14.3

The following were the principal recommendations:—South-going convoys to leave Lerwick at 9 a.m., cross 59° N. between 0° and 1° W., and 56° N. between 0° 30′ W. and 1° 30′ W; make Coquet Island about 5 a.m. North-going convoys to leave Spurn Point at 9 a.m., arriving at Lerwick on morning of third day. Convoys to consist at most of nine merchant vessels with an escort of not less than two destroyers, one submarine, and, if available, four to six armed trawlers. The requirements would be 23 to 28 destroyers and 50 to 70 trawlers.

It was hoped to obtain some of them as follows:-

Destroyers . . Humber, 3; Tyne, 2; Rosyth, 2; Invergordon, 2; total, 9.

Trawlers ... Orkneys, 18; Invergordon, 9; Aberdeen, 4; Forth, 6; Tyne, 8; Humber, 8; total, 53.

¹ i.e., Admiral, Orkneys and Shetlands, Admiral Sir Frederick Brock whose Headquarters were at Longhope in Scapa Flow.

² C.-in-C., March 28, 1917, 8.6 p.m. H.S.392/1243.

³ Report in H.S.A.102/54.

⁴ Secretary was Staff Paymaster Reginald Butcher.

¹ H.S.393/490, C.-in-C., March 30, 1917, 11.43 p.m.

² Admiralty (Captain Claude Seymour for D.O.D. and Lieutenant Lionel A. Cazalet for D.T.D.); Flag Commander Arthur Betty for C.-in-C., Rosyth, Admiral Sir Frederick T. Hamilton; Flag Captain Frederick A. Powlett for Rear-Admiral Stuart Nicholson, East Coast: Commander George Warness, R.N.R. for Rear-Admiral Stornoway; Commander Harold Innes for Rear-Admiral Edmund Pears, Invergordon; Commander Henry Collins, R.N.R., for Commodore James E. Goodrich, R.N.R., Peterhead.

³ It turned out to be nearer six. C.-in-C., Rosyth, May 10, 1917.

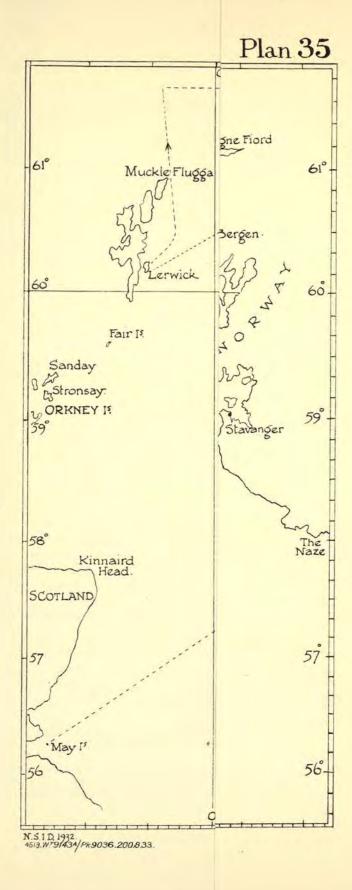
Escorts for fleet auxiliaries would continue to be ordered by the Admiralty.¹

A mass of 41 vessels had meanwhile collected in Lerwick, where the congestion was becoming dangerous on April 6.2 The Commander-in-Chief, in forwarding the report, remarked that "patrols have given little, if any, security to shipping during the war"; "escorts have proved an effectual protection," and, as "it is manifestly impracticable to provide an escort for each individual vessel, the only alternative is a system of convoys." Destroyers were an essential feature of an escort, but the difficulty was to find them. He suggested that the bulk should be drawn from the 7th Flotilla. The report went on to the Admiralty on April 9.

281. America enters the War, April 6.—On April 6 an event happened which overshadowed Scandinavian convoy and everything else on land and sea. The United States declared war on Germany. The declaration had been expected six weeks before, and on February 17 the Navy Department had asked the Naval Attaché (Captain Guy R. A. Gaunt) what they could best do immediately the break occurred. At Whitehall it was thought better that these matters should go through the diplomatic channels, and no answer was returned.

But on March 20, Captain Gaunt returned to the attack. He had had a conference with the Assistant Secretary of the Navy, who was anxious for a scheme of co-operation to be communicated at once. The Foreign Office thought it inadvisable to open official communication with the Navy Department till President Wilson had defined his position, but Mr. Balfour agreed to the technical views of the Admiralty being communicated privately to the Naval Attaché, to be imparted privately to the Navy Department if his advice was asked.

A War Staff Memo.⁹ was ready on March 24. It suggested that America should be ready to hunt down raiders with a flying squadron in the North Atlantic and on east coast, South America. Assistance



¹ Report of Conference, April 4,1917, in M. 04273/17, X.13259/1917, p. 25, V.A.O. & S., April 5, 1917.

² H.S.406/520.

³ 20 destroyers — 14 in Humber and 6 in Tyne — under Captain Alan C. Bruce.

Note.—British Summer Time commenced April 8, 1917, at 2 a.m.

⁴ Admiralty to Commander-in-Chief, April 6, 1917, 1350. "Congress has declared in favour of war, 373 votes to 50." H.S.A.39, Grand Fleet, In Telegrams.

⁵ M.01995/17 in Foreign Office, February 19, 1917.

⁶ D.O.D., February 21, 1917, and C.O.S., February 21, 1917, in *idem*.
⁷ On March 21 the President summoned Congress to meet on April 2 to consider matters of grave public interest.

⁸ Minute, March 22, 1917, 1 S.L., March 22, 1917, in idem, 25.

⁹ Idem, 43.

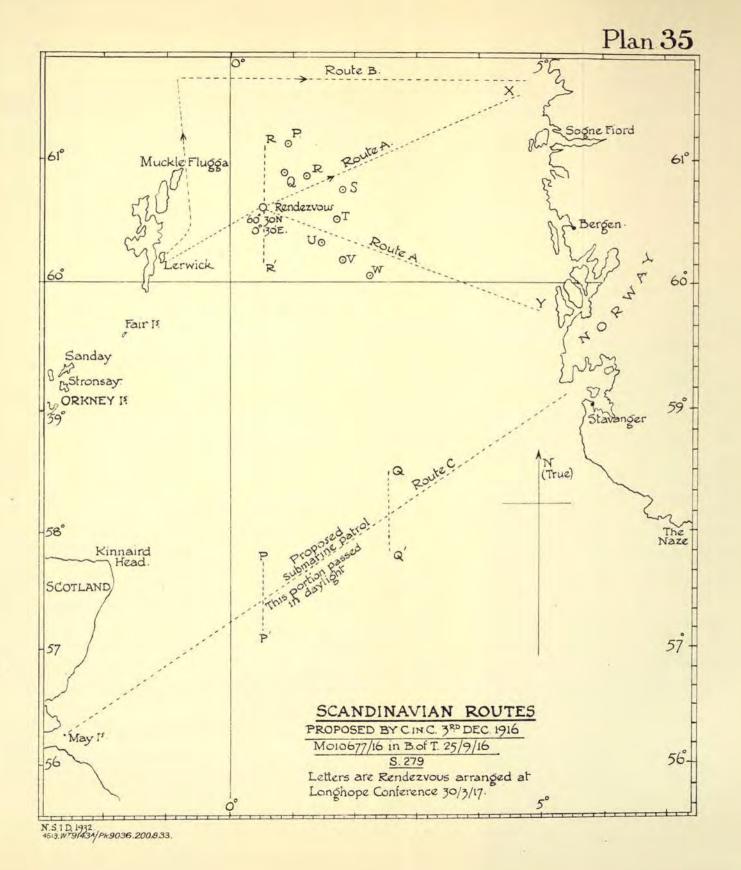
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⁹ Idem, 43.

in the form of destroyers on the coast of Ireland would be most welcome, and all facilities would be given for a base on the south coast. The United States should also "look after" the west coast of North America. The Memo. went off by the *Berwick* to Captain Gaunt "for his personal guidance."

By the end of March matters were only waiting for the clock to strike. The Commander-in-Chief, North America and West Indies, Vice-Admiral Montague E. Browning, was told to be ready to proceed to the United States. On April 3 came a letter from Admiral Beatty enquiring as to the effect of America's pending entry on (a) the blockade, (b) H.M. ships in Atlantic, (c) the co-operation of American naval forces with Grand Fleet, (d) submarine campaign.

He was informed that the views of the United States Navy on (c) had not been ascertained, and, with regard to submarines, if the enemy started a submarine campaign off the United States coast, this would reduce the pressure at home.

On April 8, H.M.S. Leviathan, with Admiral Browning, and the Jeanne d'Arc, with the French Admiral Grasset, left Bermuda for Annapolis. They arrived at the Chesapeake on April 10.

282. Admiral Browning's Conference, Washington, April 11.—
That day a meeting³ was held with Admiral Benson, Chief of Operations, and Admiral Mayo, Commander-in-Chief of the Atlantic Fleet. The next day they all arrived at Washington, and there a conference was held under Mr. Secretary Daniels with Mr. Frank Roosevelt, Assistant Secretary, Admiral Badger, and Admiral Fletcher, and many others.

The suggestion to send destroyers was not enthusiastically received. Two were stated to be ready to leave forthwith. Admiral Mayo wished to send six, but as this proposal received no backing, Admiral Browning expressed "grateful thanks" for the two, after Mr. Frank Roosevelt had whispered that more would most certainly be coming. A South Atlantic squadron would be sent as soon as possible. Admiral Grasset was anxious to fix the exact limits of action of the allied squadron, and was very pressing about it. He had instructions, too, to lay stress on the extremely useful help the American Navy could give by coming over to co-operate with flotillas against submarines. Admiral Mayo, though reserved and of few words, was completely friendly, and intervened with timely suggestions. Admiral Grasset "showed some discontent," and his attitude was "somewhat unfortunate," though he was most patiently

 $^{^{1}}$ C.O.S. minute, however, says " it was not intended to ask the U.S.N. to co-operate with the Grand Fleet."

² Idem, p. 167.

³ Admiral Browning's report of same, April 23, idem, 135.

[&]quot; Seemed to be unacceptable."

⁵ For Admiral Grasset's instructions, March 24, see idem, 149.

listened to. He then considerably delayed matters by displaying a tendency to regard the report as a diplomatic convention, although Admiral Benson explained that it was nothing of the kind, but merely a broad statement of the naval policy that the United States proposed to adopt. Admiral Browning, however, received another whisper from Mr. Frank Roosevelt that 18 destroyers would eventually come over, and that right soon.

The principal points agreed upon were cabled on April 131:-

- (1) A squadron would be ready in North Atlantic to proceed on receipt of information as to escape of raider.
- (2) A second squadron would be provided as soon as possible on the east coast of South America.
- (3) Six destroyers would be sent over in the immediate future to be based on British or French ports as might be considered most necessary.

On points raised by the French Minister of Marine :-

- (1) The provision of small patrol vessels for French coast was not yet possible owing to requirements of home defence.
- (2) The provision of armed naval transports for passage to France would be furnished immediately.

The conference ended. Its principal task had been achieved, and was reported, not by the Commander-in-Chief, North America and West Indies, but by Sir Cecil Spring Rice.² Admiral Browning's visit had been a great success, and he had succeeded in establishing the most cordial and satisfactory relations with the United States naval authorities. A great deal perhaps came out of that small seed. Their Lordships expressed their keen appreciation. Captain Guy Gaunt had already been appointed Naval Liaison Officer.

283. Mr. Balfour's Mission Sails, April 14.—In England it had been decided to send over a mission under Mr. Balfour. It included Rear-Admiral Dudley de Chair. The *Olympic* was detailed to embark them at Lough Swilly on the night of April 11–12, but this was postponed for a day. The mission was in the train speeding northward on April 12³ when, at 4.48 p.m., came a signal from a little trawler to say she had found mines on the route 2 miles south of Inishtrahull.⁴

The sailing was cancelled at once, and in strictest secrecy, compromised only by Mr. Balfour giving his autograph to a lift boy, the mission went on to Greenock, while all the Buncrana minesweepers and escorting destroyers swept out on a route west of Islay.

All was clear, and on April 14, at 1 p.m., the *Olympic* moved slowly off, carrying Mr. Balfour on his momentous mission. Ahead steamed the *Michael, Marmion*, and *Sable*; a heavy sea was running outside, and the bridges of the little vessels were swept entirely away. The *Olympic* went on her way, and by the end of the month six United States destroyers were heading back across the Atlantic.¹

284. Conference, Rosyth, April 14.—It was a time of stress. While the First Lord (the Right Hon. Sir Edward Carson) was waiting for the momentous cable from America, he arranged to go north with the Prime Minister and see the Commander-in-Chief on April 14.² They went north with the First Lord's Naval Secretary, Captain Edward Philpotts, and Private Secretary, Mr. J. E. Masterton Smith.

The only account of the meeting lies in the notes of the Commanderin-Chief.³ In them the Commander-in-Chief laid special stress on the lack of a staff system. There was "no planning body" at the Admiralty; "no executive authority by which rapid decisions are obtained and instant action given." The Heligoland barrage had been proposed to be carried out "on a vast scale," but the fields had only "been laid in driblets." The convoy system suggested had been considered impracticable; now, at length, it was being introduced, but matters of detail took weeks to settle owing to the "want of executive action and authority." The remedy lay in a thorough re-organisation of the staff system. The Second Sea Lord must be "the right hand man of the Chief of Staff." The Commander-in-Chief wanted, too, to be supplied with a more detailed appreciation of the situation; a certain amount of information had been supplied, but this was usually in answer to a request.⁴ It was of the utmost importance that the staff appreciation of the ever varying situation should be communicated at the earliest possible moment to the Commander-in-Chief in order to ensure the utmost co-ordination between the Admiralty and the Commander-in-Chief. It was probably these questions that the Commander-in-Chief, at the First Sea Lord's request, went down on April 17 to discuss with him.⁵ The headings of the correspondence taken south by the Commanderin-Chief indicate the principal matters then under consideration. They included anti-submarine policy, minelaying in the Bight, trade convoys, policy towards U.S.A., the allocation and detachment of destroyers. It was possibly as a result of the conferences of this time that Admiral Jellicoe decided on the re-organisation of the Naval Staff which subsequently took place.

¹ Idem, 131.

² Spring Rice to Foreign Office, April 25, idem, 159.

³ H.S.407/360, H.S.408/117.

⁴ Laid by U.79 on April 18; U.78 laid 10 off Lough Swilly on April 10.

¹ H.S.411/380, 412/597.

² H.S.A.39, H.S.406/310.

³ H.S.A.141/170.

⁴ This evidently referred to Room 40 intercepts.

⁵ H.S.409/433. 1st S.L. to C-in-C. "There are several matters I should like to discuss with you."

285. Longhope Report.—The report of the Longhope Conference (see s. 280) had gone to the Admiralty and was waiting for the various commands to forward their remarks. Opinion was generally favourable. Rear-Admiral E. R. Pears, at Invergordon, preferred smaller convoys of five ships escorted by two destroyers and four trawlers. Commodore James E. Goodrich, R.N.R., at Peterhead, demurred to trawlers being taken from his base as he had just enough to escort store ships up and down the coast. Finally, Admiral Sir Frederick Hamilton, Commander-in-Chief, Rosyth, gave his general concurrence. He pointed out, however, that the enemy would sooner or later discover the scheme of convoy, and attack the ships before they reached the rendezvous. He suggested that all the 8th Flotilla (seven destroyers) in the Forth should be transferred to the Humber for escort work, and a "striking force" of Grand Fleet destroyers should be based on Invergordon. Patrol work, he thought, must stand aside in favour of providing escort for convoysin short, "all armed trawlers would in future be employed in escorting or minesweeping or both." Rear-Admiral Stuart Nicholson, East Coast of England, struck an adverse note. He was in favour of individual escort by single trawlers for valuable ships, while the rest of the trade should proceed independently with destroyers patrolling the route. He considered the 30-knotters unsuitable for the work. Further, as soon as the Germans got to know of it they would attack with a strong destroyer division, overpower the weak protecting force, and sink the valuable convoy-a forecast which ultimately proved correct, but was not fulfilled for several months.1

While the Admiralty was still considering the question, provisional measures were taken by Admiral Brock, Admiral Hamilton, and the Commander-in-Chief.

The Commander-in-Chief, Rosyth, in practice showed himself a whole-hearted supporter of the idea, and on April 10 proposed to detail at once two destroyers and armed trawlers to meet south-bound convoys from Lerwick and escort them through Scottish waters; he asked the S.N.O., Tyne, if he could meet them off St. Abb's Head. These proposals were reinforced by a heavy attack by U.30 on the Lerwick-Bergen route.2

286. Attack by "U.30" and "U.C.76."-U.30 had left on April 5 with orders to attack the Lerwick to Bergen route. At midnight on April 10, 42 miles west of Hellisö Light (about 60° 46' N.), she torpedoed the Danish S.S. Nancy (1,310 tons), and then the Danish S.S. Saxo (711 tons), which was with her. They seem to have left the Norwegian coast at dusk and to have been on their way to

> ¹ C.-in-C, Rosyth, April 9, in X.13259/17. 2 H.S.407/854.

rendezvous "S" (60° 45' N., 1° 50' E.).1 U.30 proceeded east, and at 6.15 a.m. sank the Norwegian S.S. Star (818 tons) by gunfire, and during the forenoon sent to the bottom two more Norwegian ships, the S.S. Kolaastind (2,363 tons)2 and the S.V. Sylfiden (796 tons). All four ships had been sunk long before they reached the rendezvous, and their loss was a nasty blow to the new system. On the other hand, during the week April 7-14, 40 ships were escorted safely to Peterhead and seven ships taken eastward out to the rendezvous, which Admiral Brock had commenced to vary.3 Two days elapsed before U.30 made herself felt again, on April 13, not far off the rendezvous, where she met and sank five ships. The rendezvous in force since April 12 was "V," in 60° 11' N., 1° 50' E. At 6.30 a.m., the Norwegian S.S. Gama, a small whaler of 107 tons, with 689 bags of mail on board, was torpedoed some 24 miles north-west of the rendezvous. The Norwegian S.S. Bokn (400 tons) followed her to the bottom at 8.30 a.m., and at 11 a.m., in 60° 20' N., 1° 33' E.,4 the collier transport Frixos (2,471 tons), flying the Russian flag, was torpedoed, and sank at once with all hands except the mate. The British S.S. Zara (706 tons) on her way to Bergen, was the next to go at 4.45 p.m. in 60° 8' N., 1° 32' E. There was a heavy explosion; she went down in two minutes, and out of a crew of 44 only 23 were saved, of whom five died of exposure. At 6.30 p.m. (April 13), the Norwegian S.V. Glenlora (805 tons), on her way from Denmark to America, was sunk by gunfire while lying becalmed, and the next day, April 14, at 7 a.m., the Norwegian S.S. Fjeldli (1,800 tons) was missed by a torpedo and sunk by gunfire. The crew of the Norwegian S.S. Rondane, astern of her, had hurriedly abandoned ship, and were in their boats when the destroyer Arab came racing up and drove the submarine down. The crew of the Rondane went aboard again, and the ship was saved. U.30, however, had not done so badly; she had been lurking very successfully round about the rendezvous,5 and had altogether sent some nine ships to the bottom. The next day, April 15, she was sighted at 7.30 a.m. by the British S.S. Avona, which turned at once to the southward, and escaped; that evening, at 5.45 p.m., she stopped the Norwegian S.S. Svanfos and Borgila in 59° 58' N., 4° 18' E. But the Commander-in-Chief had two submarines patrolling there, and G.7, which had been following her all the afternoon, came up, and, opening fire, forced her to dive, leaving four Germans on board the Svanfos, which got safely to Haugesund⁶ (see s. 365). (Plan 36.)

6 H.S.627/63.

¹ In force April 9 to 11. H.S.622/238. See Plan 36.

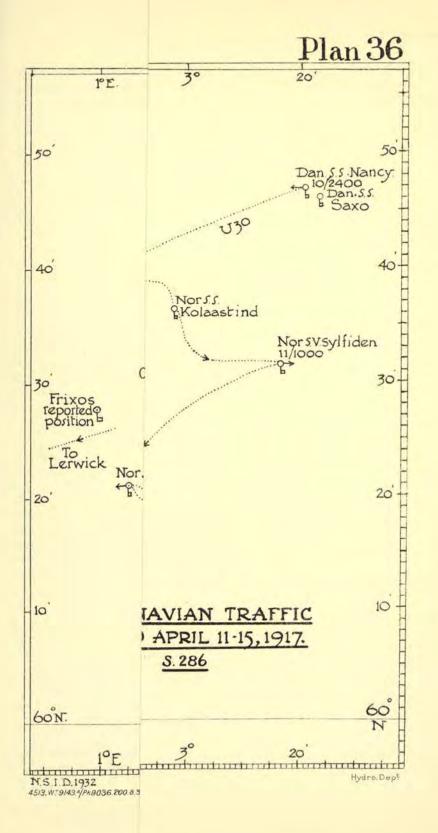
³ March 18 to April 7, it was 60° 30′ N., 1° 30′ E., April 9–11, rendezvous "S" 60° 45′ N., 1° 50′ E.; April 12, rendezvous "V" 60° 11′ N., 1° 50′ E.

⁴ This is her more probable position, for the Bokn saw her 8 miles south. 5 Admiral, O. & S., reported the ships sunk on April 13 as having been north of the r.v., but it looks as if the Bokn and Gama were making for the old r.v., see Plan 36. Arab's position for Fjeldli. M.65254/17.

The news arrived at 4.30 p.m. on April 16, and the next day, April 17, Admiral Brock recommended Bergen to stop sailings, and arranged with Admiral Madden² for 25 Norwegian ships at Lerwick to proceed along the parallel of 61° 30′ N., under trawler escort, reinforced by four destroyers. Meanwhile, U.C.76 had appeared off the Orkneys, and that day, April 17, managed to sink a ship in convoy. This was the Danish S.S. Robert (1,445 tons), on the way to Peterhead for Hull in a convoy of six vessels, escorted by one whaler and three armed trawlers. She was torpedoed off Fair Isle (59° 28′ N., 1° W.) at 12.15 p.m., and seven were killed out of her crew of 19.

U.C.76 moved to the southward, and the next day (April 18) torpedoed another ship under escort. This was the Norwegian S.S. Bergensgut (2,029 tons), proceeding from Lerwick to Peterhead for Rouen in a convoy of two ships under escort of the whaler Balaena and the armed trawler Elite. At 6 a.m. she was in 58° 18′ N., 1° 16′ W. (off Moray Firth), when she was torpedoed, and went down with a loss of 11 out of her crew of 22. The captain of the Balaena attributed the loss to the slow speed of the Elite, which could not keep on the bow of the convoy.⁴

Meanwhile U.C.45 was working a little to the southward in the very same area off Rattray Head, where she had sunk four ships a month before. On April 17, she torpedoed at 2.45 p.m., 9 miles north-east of Rattray Head (57° 46' N., 1° 38' W.), the Danish S.S. Bretagne (1,110 tons) going north from Newcastle to Copenhagen unescorted. U.C.45 missed her with one torpedo, and struck her with the second. She sank in about ten minutes with no loss of life. The next day (April 18), in the same area, at 12.50 p.m., in 57° 47' N., 1° 15' W., she torpedoed without warning and sank the Danish S.S. Louisiana (3,015 tons), on her way to Boston and going north unescorted, whose master had been told by the Shipping Intelligence Officer, Newcastle, to keep along the southern shore of the Moray Firth. The whaler Balaena, coming south with the S.S. Varoy after the S.S. Bergensgut had been sunk, sighted her sinking, and picked up the crew.5 The Admiralty had stopped traffic to the southward, and on hearing of these attacks, the Admiral, Longhope, had ordered convoys from Lerwick and Kirkwall to be diverted to Cromarty, 6 and sent a priority message to the Commander-in-Chief to say that he had stopped sailings between Bergen and Lerwick, and that he strongly recommended the adoption of the escorts suggested



¹ H.S.409/823

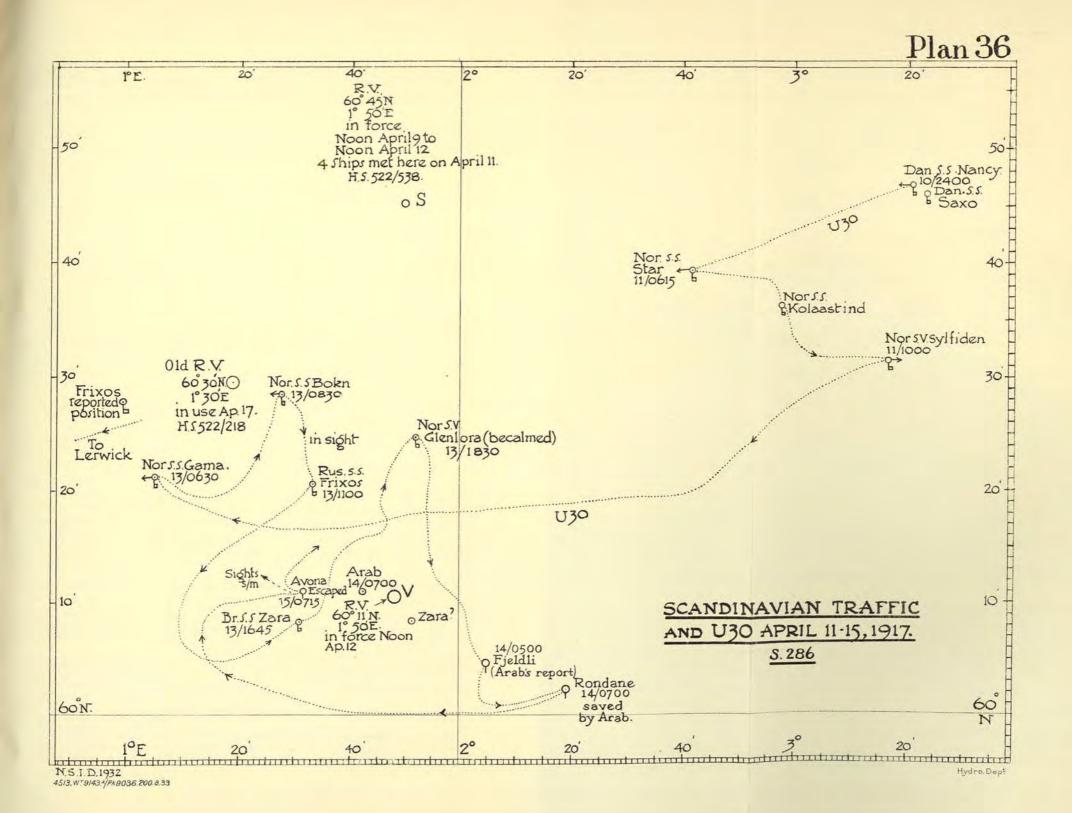
² The C.-in-C. had gone south on April 16 to see the First Sea Lord, H.S.409/433.

³ H.S.522/257.

⁴ V.A., O. & S., report April 19, 1917. H.S.522/262.

H S 522/261

⁶ H.S.409/1295, A.C. 1st B.S., April 18, 1917, 11.33 p.m.



by the conference, 1 to be based on Immingham. 2 The Commanderin-Chief had not returned from London at the time, but on April 19, as soon as he returned, he asked that the immediate question of convoy, as recommended in his letter of April 9, might be considered and put into force, in view of submarine activity between Lerwick and Aberdeen. Meanwhile, as a temporary measure, convoys would be strengthened by destroyers from Grand Fleet.

287. Admiralty Approval for Scandinavian Convoy, April 24.—
The Longhope Report had reached the Admiralty a week before (April 11). The Director of the Trade Division (Captain Richard Webb) concurred with it on April 12, pointing out that the main question at issue lay between the provision of escorts for convoys and the work of escorting service vessels and minesweeping. The Director of the Anti-submarine Division (Rear-Admiral Alexander L. Duff) remarked (April 19) that convoy was a question on which very different opinions were held, and that he thought that an escort to be effective must consist of two escorts to each ship. The Commander-in-Chief's telegram (s. 286) came in that day (April 19), and on April 20 the Chief of the War Staff (Acting Vice-Admiral Sir Henry Oliver) concurred in the report, though he was very doubtful whether the system would be a success.³

Meanwhile the Commander-in-Chief had ordered traffic to be resumed (April 19), and asked for two Rosyth destroyers to relieve those from Lerwick off Rattray Head, while the Commander-in-Chief, Rosyth, was pressing for a decision, for he could not go on unless the Rear-Admiral, East Coast, was able to take over convoys at the Tyne. But doubts evidently still prevailed as to the feasibility of a scheme which called for so many destroyers, for on April 21 the Commander-in-Chief was asked whether the recent losses had caused him to modify his views. The message seems to have crossed another from the Commander-in-Chief to say that the convoy system was working down to St. Abbs Head (Forth), but must be continuous to southern ports, and asking for the recommendations made on April 9 to be put into force as soon as possible.

To the Admiralty message the Commander-in-Chief sent a reply that he had not modified his views. "Convoy system has not yet had fair trial. It is an essential part of my proposals that two destroyers should accompany each convoy, utilising for purposes

¹ H.S.409/1224.

² H.S.410/148.

^{3&}quot; As convoys invite torpedo attack and the available escorts are too few."

⁴ C.-in-C., Rosyth, April 20, 1917, 1750, H.S.410/700. C.-in-C., July 19, 1917, 2232, H.S.410/410.

⁵ April 21, 1917, 415, H.S.410/1020. The losses were the Danish s.s. Robert and Norwegian s.s. Bergensgut (see S.205).

⁶ C.-in-C., April 21, 1917, 1550, H.S.410/1100.

destroyers of 7th D.F. and 8th D.F. Only two ships have been sunk under convoy from Lerwick to East Coast port, in neither of which cases were destroyers present."1

There were 21 neutrals waiting at the time to sail from Tyne port, and it was under these circumstances that Admiral Jellicoe, the First Sea Lord, on April 21 gave his approval to the scheme of Scandinavian convoy.2

The Rear-Admiral, East Coast, was directed at the same time to provide the necessary escort, River class destroyers and trawlers, to meet south-bound convoys off Tyne and escort them to the Humber, and vice versa,3 thus completing the coastal chain of convoy.

The provision of destroyers proved an immediate difficulty. The 7th Flotilla (Humber) mustered ten River class and ten 30-knotters,4 while the 8th Flotilla, in the Forth, consisted of only seven 30-knotters.5

There was, however, a strong opinion on the East Coast and at the Admiralty that the 30-knotters were not sufficiently seaworthy for the work, and accordingly, on April 22, the Commander-in-Chief was again asked whether he recommended proceeding with the scheme.6 Once again he replied in the affirmative, pointing out that 30-knotters could perform good service during the summer months,7 and Grand Fleet destroyers would assist when they could be spared. Accordingly, on April 24, there went out Admiralty authority to constitute a convoy system right up the East Coast and across to Norway. The telegram⁹ ran as follows:—

"The proposals of conference held at Longhope on April 4 to discuss measures for protecting Scandinavian traffic are approved in principle, and the system proposed is to be given a trial. The scheme is to be operated by Admiral, Longhope,9 who will arrange detailed organisation and issue all orders. East Coast convoy is to be accompanied by one River class and one 30-knot destroyer unless stronger escort can be provided.

¹ C.-in-C., April 21, 1917, 5.55 p.m., H.S.410/1113.

"The destroyers to be appropriated as follows:—

Humber and Tyne	 4.5	10 River class
Firth of Forth	 	7 30-knotters
Cromarty	 	3 30-knotters

making total of 20 destroyers.

"The trawlers are to be appropriated as follows:-Orkneys, 18; Cromarty, 5; Graton, 6; Tyne, 8; Humber, 8; making total of 45 trawlers.

"... The destroyers and trawlers referred to above will be based on Immingham. Trawlers for escort between Berwick and Stornoway will be provided by Stornoway. A report is to be forwarded by Admiral, Longhope, after the scheme has been in full operation for a fortnight. 1240.

D.A.S.D."

The traffic stopped on April 17 had been released by the Commander-in-Chief on April 19,1 but the Admiralty had apparently not released it on the East Coast, so that by April 26 there was a congestion of 40 valuable ships in the Tyne, and the Commander-in-Chief pointed out that seven valuable days had been lost and the difficulties of escorting so large a number at the initiation of the scheme were very great.2

Everything, however, was now moving. By April 26, Admiral Brock's arrangements were complete, and his orders went out.3 The escorting forces consisted in all of 20 destroyers and 45 trawlers, of which it was estimated that 12 destroyers and 36 trawlers would be acting as escorts at one time.

The general conduct of convoy was under the Admiral, Longhope; its administration (discipline, upkeep) under R.A., East Coast. The trawlers were divided into six units, each of seven or eight trawlers, each unit being designated by a letter (A to F). Two destroyers (one River and one 30-knotter) were to accompany each escort. Convoys were to sail from Lerwick and Immingham, respectively south and north, on three days out of every four. They were to be under the S.O. of the destroyers present. Routes were to be settled by Admiral, O. and S., and communicated to R.A., East Coast, and S.N.O., Lerwick. Speed of convoys was calculated at 7 knots, and the voyage from Immingham to Lerwick should occupy 64 hours. The orders ended with a preliminary programme.

On April 29 the first south-bound convoy left Lerwick, consisting of seven neutral steamers, escorted by four trawlers and two

^{2 &}quot;The system to be tried and a report sent fortnightly on its working. River class destroyers to be used from Humber. J.R.J." April 21, in X.13259/1917, p. 32.

³ H.S.410/1130.

⁴ River Class were about 550 tons, built 1904-6; the 30 knotters ranged from 1895 to 1901 and were about 335 tons.

⁵ Positions and movements, April, 1917.

⁶ To C.-in-C., April 22, 1917, 1500, H.S.411/222.

⁷ H.S.411/377.

⁸ Admiralty to C.-in-C.; Admiral, Longhope; C.-in-C., Scotland; R.A. Invergordon; Commodore, Peterhead; Commodore, Granton; R.A. East

Coast: S.N.O. Tyne; R.A. Stornoway; April 24, 1917, 1240, H.S.411/919. 9 Admiral Sir Frederick Brock.

¹ H.S.410/410, April 19, 1917, 2232.

² H.S.412/384, 632.

³ Memo. 041, Admiral, O. & S., April 26, 1917, in X.13259/17, p. 45. This is the only copy that has been seen.

Grand Fleet destroyers, the *Radstock* and *Northesk*.¹ A north-bound convoy left the Humber the same day, escorted by the destroyers *Waveney* and *Vigilant*. Both convoys arrived safely at their destination, and thenceforward the East Coast convoy system became a regular routine, and proved not only practicable, but a complete success.

288. General Convoy.—The proposals for Scandinavian convoy had arisen largely from the Commander-in-Chief and Admiral, Longhope, who were closely in touch with the actual circumstances. But beyond and running parallel with it was the much larger issue of general convoy. Its development has been told at length in the Official History,² but a few words may be said of the Admiralty outlook at the time. In the early years of the war the safety of neutral shipping had been regarded as a matter for the Powers concerned to settle on a basis of International Law. "It had never been contemplated that we should have a big enough Navy to protect the whole of the world's commerce."

This was the view that Admiral Jellicoe must have encountered when he came to the Admiralty, and it prevailed right up to the end of 1916. The patrol system then in force was sufficient for certain primary needs, namely, the protection of storeships, munition ships, troopships, and British ships that were specially valuable. Other ships must trust to defensive armament, skilful routeing, and darkness.

The idea of general convoy first found definite expression in a memorandum prepared on February 11 by Sir Maurice Hankey for the Prime Minister (Mr. Lloyd George), which the Prime Minister used on February 13 as a basis of discussion at an informal conference with the First Lord, Lord Carson, the First Sea Lord, Admiral Jellicoe, and Rear-Admiral Duff, D.A.S.D.⁴ On February 19, the First Sea Lord reported to the War Cabinet that the Admiralty were going into the question of convoys.

On February 23, 10 masters of vessels⁵ were interviewed at the Admiralty on the subject, and expressed an unanimous opinion against convoy. The question remained, therefore, in abeyance for a time, but during March the tale of losses grew and grew in the Channel. The French controlled trade was working with considerable success, and in the north Admiral Sir Frederick Brock had instituted a tentative system of protection for Scandinavian traffic.

5 Report has not been seen.

289. Misleading Statistics.—The principal difficulty in the way of convoy was the large numbers of destroyers required. This in its turn depended on a correct estimate of traffic on the routes concerned. Here the figures were published in a form which might give rise to serious misunderstanding-and apparently did. Every week the Admiralty published a statement giving the arrivals and sailings of merchant vessels of all nationalities (over 100 tons net) at or from United Kingdom ports and the number of British merchant vessels sunk, divided into over and under 1,600 tons gross. Useful as propaganda, which was its original purpose, the statement was statistically useless. The arrivals and sailings included small coastal craft and Channel craft, so that a small coaster of 200 tons leaving the Thames on Monday and calling at Lowestoft, Hull, and the Tyne during the week figured as three arrivals and three departures, while a cross-channel boat could easily be counted eight times over as four arrivals and four departures.

In this way the figures of arrivals had become swollen to something like 2,400 a week, giving an impression of some 300 ships requiring convoy daily.

Actually the number of *ocean*-going ships arriving weekly from the North and South Atlantic was barely 20 per diem, or 140 a week.²

Again, the sinkage of British vessels over 1,600 tons for the week ending April 22, 1917, was 40; but while 40 out of 5,206 arrivals and sailings might seem a small matter, 40 large ships sunk out of 140 arrivals and, say, 140 departures, was nothing less than a presage of impending disaster.

These weekly statements³ were issued with the laudable intention of encouraging the Allies and dismaying the enemy, but they did not mislead the German Naval Staff nor English shipping circles.⁴

The Admiralty certainly possessed a much more accurate estimate, for in December, 1916, when Admiral Jellicoe had considered the question of putting trade under convoy as a protection against the raider *Moewe*, figures of Atlantic traffic had been prepared for him by Captain Bertram Smith (Trade Division). These showed an average monthly total of munition ships sailing from North American ports of 94, or about three a day. Captain Smith also worked out

¹S.N.O. Lerwick, April 29, 1917, H.S.413/596.

² Naval Operations, Newbolt, vol. 5, p. 8. ³ Chief of War Staff, November 30, 1916.

⁴ For the full text of Sir Maurice Hankey's memorandum, see Official History, Naval Operations, vol. 5, p. 11.

¹ For week ending April 22, 1917, arrivals were given as 2,585, sailings as 2,621. T.H.14, Atlantic Convoy, p. 4.

² On April 30, 1917, we had 3,534 British ships of 1,600 tons gross and over, of which 1,125, or 31.8 per cent., were employed on naval and military service.

³ Atlantic Convoy, p. 4 (by Paymaster Captain H. W. E. Manisty).

⁴ Mr. Runciman headed a deputation in April to the War Cabinet to complain that they were deceptive,

the numbers of British ships en route daily in the North Atlantic. His numbers were as follows¹:—

(A) From North American ports, daily,	on	
voyage to—		
United Kingdom	+3	76
France		26
Mediterranean		26
		575
		128
(B) Number of ships from above ports g	iven	
special routes (i.e., transports, etc.) in	
December		79
(C) Daily average of these vessels on vo-	vage	
during December		33
(D) Estimated monthly sailings from above 1	orte	
to—	001 (3	
United Kingdom	- 11	180^{2}
France		62
Mediterranean		62
		_
		304

These figures pointed to an average number of about six to seven ships arriving daily on the North Atlantic route. "Hard facts clearly grasped are the only guide to action." The Weekly Statement remains a standing warning of the danger of imperfect statistics.

The Ministry of Shipping, co-operating with the Anti-submarine Division,³ was able in April to produce exact figures showing the actual arrivals and departures in the ocean trades⁴ to be between 120 or 140 a week, or about 20 a day.⁵ These figures placed the possibility of convoy in a new light, and brought it definitely within the domain of possibility.

290. **Destroyers available, April, 1917.**—To start a comprehensive scheme of convoy, it was considered that something like 72 destroyers would be required. There were on March 31, 311 afloat (including four completing) in home waters, but of these some 36 employed in local defence were too old for convoy work.

¹ M.0533/16, Convoys for Trade, Admiralty, December 24, 1916.

³ Commander Reginald Henderson was one of the principal workers in this sphere.

us sphere.

⁴ i.e. North Atlantic, South Atlantic, East via Gibraltar and Cape.
 ⁵ From West Coast ports. To Gibraltar (Mediterranean) 8 per day; to Dakar (South America and Cape) 3½; to Gulf or South of New York 3¾; to New York and North, 5 per day. M.05113/17 in Convoy Records 132/125.

The position at home on the two dates, March 31 and April 26, 1917, may be examined from the Admiralty point of view at the time:—

DESTROYER POSITION.

March 31. Ap	ru	26.
--------------	----	-----

(Number repairing or refitting in brackets.)

	Grand Fleet.		
1.	11th, Scapa	207	20)
2.		20	20
3.		27 > (13)	27 > (12)
4.		20	20
5.		20	19
6.		10)	11-2-11
7.		26 } (7)	28 (4)
8.		40 (11)	40 (10)
9.		20 (5)	24 (6)
10.		7 (2)	7 (1)
11.	Portsmouth, 1st D.F	8 (2)	10 (1)
12.		12 (3)	12 (3)
13.		16 (5)	16 (6)
14.		13 (4)	19 (3)
15.		4	4 (2)
16.	Local defence, Scapa	10 (4)	10 (3)
17.	" Cromarty	5	5 (2)
18.		8 (2)	8 (4)
19.			11 (2)
20.	" Devonport	5 (1)	5 (1)
21.		8	8 (1)
22	Completing	4	8
		Service Services	
		311(62 = 20)	1%) 321 (61)

These numbers, however, represented only the nominal distribution, and not the actual strength on the spot. Out of the Grand Fleet's 107 on March 31, there were 13 repairing or refitting, and 15 detached, so to speak, on loan, to Devonport 4, Queenstown 4, Harwich 6, Portsmouth 1, leaving only 79 actually ready for fleet work. It was not possible, then, to draw any large number from the Grand Fleet without partially immobilising it. Again, the older destroyers employed on local defence were not suitable for ocean convoy work; and there were also a certain number already employed on escort work or doing work of that nature. If we subtract

² The number of ships given routes from North American Ports to the United Kingdom was 179 in April, 1917. (From Telegrams.)

¹ April 27 was the date of decision to adopt convoy. From Positions and Movements (Pink List) for these dates.

² Including Vernon 2. The Orcadia, detached from 15th Flotilla, was also lent to the Vernon.

from the figures for March 31 and April 26 (viz., 310 and 321), those employed on local defence (viz., 36 and 39), there remain 274 and 282 as the strength in suitable destroyers on those respective dates.

For general convoy it was estimated that 72 would be required stationed as follows:—

	Required.	Already there.	Leaving to be provided.
Lough Swilly	18	4	14
Queenstown	36	42	32
Brest or Devonport	18	32	15
	-		-
	72		61

So that there was a call for no less than 61 destroyers to be provided. From this figure, however, must be subtracted the 2nd and 4th Flotillas (lines 13, 14 supra) at Devonport, which were already employed on quasi-convoy work,3 and could be appropriated at once to it. These mustered 29, leaving 32 to be provided. The crucial question confronting the Admiralty was to discover where these 32 destroyers were to be found. No more could be taken from the Grand Fleet. The 7th (Humber) and 8th (Forth) mustering 20 and 7 respectively, were already ordered, on April 24, to be appropriated to Scandinavian convoy. The Escort Flotilla (Portsmouth) was already doing escort work. Dover certainly had a large force, but, taking everything into consideration, it was not too large to meet the calls upon it. A ray of hope, however, came from across the Atlantic. On April 10, Admiral Jellicoe had a momentous conversation with Admiral Sims. A few days later it was known that the U.S.A. were sending six destroyers, and there were expectations of more. By the end of the month there were 184 coming or preparing to come; and by May this figure had increased to 36, and the destroyer position was cleared up. But it had not been by any means so clear at the beginning of the month, and the lack of 30 destroyers had been one of the chief obstacles that stood in the way of convoy.

291. Admiral Sims arrives, April 9.—Towards the end of March, 1917, Admiral Sims, who was then President of the Naval War College at Newport, received a message summoning him to Washington. War was imminent; he was to proceed at once to England in secrecy and not in uniform. With the secrecy that characterised the work of the war, Messrs. S. W. Davidson (Admiral Sims) and

4 Six to arrive May 2, 6 leaving May 3, 6 a little later.

V. J. Richardson (Commander J. V. Babcock, U.S.N.) went on board the U.S.S. *New York* in civilian garb, and saw the shores of America disappearing from view.

But the disguise availed them nothing. The New York was met most disagreeably off Liverpool by one of U.C.65's mines, but she managed to get into harbour on April 9, and a special train carried Admiral Sims at once to London. On April 10 he saw Admiral Jellicoe, "calm, smiling, and imperturbable." He was also shown facts and figures demonstrating an "appalling destruction of merchant tonnage." Germany was, in his opinion, in fact, "winning the war." Admiral Jellicoe made it quite clear that the position was very serious. Admiral Sims, after studying the figures, came to the conclusion that the position was critical. He sent off at once a long despatch to Washington.2 "The submarine issue is very much more serious than the people realise in America." "The issue must inevitably be decided at the focus of all lines of communications in the East Atlantic." He very urgently recommended immediate naval co-operation in the form of a maximum number of destroyers to be based on Queenstown; merchant tonnage, too, and a continuous augmentation of anti-submarine craft. Another despatch followed on April 19.3 In neither of them was there any mention of convoy. He states that he suggested it, but was informed that the merchantmen were opposed to it.4 The day after Admiral Sims' interview, the Commander-in-Chief's proposals for Scandinavian convoy⁵ arrived at the Admiralty. A suggestion was put forward that day (April 11) for the construction of an unsinkable 50,000-ton ship for the carriage of wheat in emergency. On April 13, the Prime Minister visited the Commander-in-Chief at Rosyth, and on April 17 the Commander-in-Chief was in London in conclave with the First Sea Lord. Momentous questions were discussed.

292. Convoy approved, April 26.—On April 19, Rear-Admiral Duff, D.A.S.D., in his minute on the Commander-in-Chief's proposals, agreed to the principle of convoy "for this particular route." On April 21, the First Sea Lord approved of the Scandinavian convoy scheme being given a trial, and Admiralty approval went off by telegram on April 24.

The day before (April 23) the First Sea Lord had submitted to the War Cabinet an important memorandum on The Submarine Menace

¹ viz.—in table on page 379, lines 16, 17, 18, 19, 20.

² Lent by Grand Fleet.

³ The 7th D.F. (Humber) and 8th D.F. (North) were appropriated to Scandinavian Convoy on April 24. The Escort Flotilla (Portsmouth) was already engaged in convoying transports across channel.

¹ Victory at Sea, Admiral W. S. Sims, 1920.

² For full text see "First Cable Message," Admiral Sims to Secretary of the Navy, April 14, 1917. Sims, 319, Appendix II.

³ See idem, April 19.

See idem, 89.
 See S.279, 287.

⁶ M.04398 in X.13259/1917, p. 35, "that the principle of convoy for this particular route is approved " See S.287.

and Food Supply.¹ It gave the figures of sinkage between April 1 and 18—169 ships (British, Allied, and neutral), of 406,897 tons, had been sunk. The only immediate remedy suggested was the provision of as many destroyers and other patrol vessels as possible by the United States. There was no mention in it of convoy, which was evidently still under consideration. The Prime Minister, however, referred that day (April 23) to the possibility of adopting a convoy system which, he said, was favoured by Admiral Beatty and Admiral Sims.² The First Sea Lord stated that the matter was under consideration, one of the chief obstacles being the shortage of destroyers.

On April 25, the question of the submarine menace was again under discussion by the War Cabinet, and it was decided that the Prime Minister should take the exceptional course of visiting the Admiralty "to investigate all the means at present in use in regard to anti-submarine warfare." Lord Milner was to investigate at the same time priority claims in shipping, and Lord Curzon the general question of the output of shipping. The Admiralty was ready for the new issue.

By April 26 the outline of a scheme had been prepared, and Rear-Admiral Alexander Duff (Director, Anti-submarine Division) embodied it in an important memo. to the First Sea Lord.⁴ "It is to me evident that the time has arrived when we must be ready to introduce a comprehensive scheme of convoy at any moment. The sudden and large increases of our daily losses⁵ of merchant ships, together with the experience we have gained of the unexpected immunity from successful submarine attacks in the case of the French controlled trade, affords sufficient reason for believing we can accept the many disadvantages of large convoys with the certainty of a great reduction in our present losses. Further, the United States having come into the war eliminates some of the apparently insuperable difficulties to a comprehensive scheme of convoy." Admiral Duff suggested that the scheme be worked out in detail and a Captain be appointed for the purpose.

An outline of certain figures and details was attached. Convoy depôts were proposed at Dakar, Gibraltar (for Mediterranean), Newport News and Louisburg (Canada). The volume of trade

proceeding to the United Kingdom on April 26 in the North Atlantic¹ was estimated as follows:—

Seminated as Ions in			Hom	eward.
		1	British and	1
			Allied.	Neutral.
Halifax, Boston			21	27
New York			48	_
Newport News (Gulf)	1.4		67	7
South-east coast America	4.4	***	34	21
Cape (i.e., Dakar)			74	18
Gibraltar (Mediterranean)	95		64	14
			3000	-
			308	87 = 395

Twenty-six vessels would have to be convoyed daily through the danger zone. Convoys would leave as follows:—

Every	5	days,	Dakar	 		18
,,	150		Gibraltar			18
,,,	4	,,	Louisburg	 	16 t	o 20
**	3	,,	Newport News	 		18

Each convoy would be met at the danger zone by six destroyers, and for this 45 destroyers² would be required.

The statistics for vessels bound from North American ports to Tyne and Liverpool were being obtained. It was suggested that a convoy scheme should be instituted for the general control of the whole convoy system. The Chief of the War Staff (Vice-Admiral Sir Henry Oliver) concurred in the proposal "to work out the scheme," and the First Sea Lord gave his approval on April 27. He was of opinion, however, that measures were necessary also in another direction to reduce our commitments at sea.

In this sense he wrote a memorandum the same day (April 27). In it he pointed out that it was absolutely necessary to reduce the number of lines of communications which the Navy had to defend. We were carrying on the war as if we had absolute command of the sea, whereas we had no such command nor anything approaching it. "We are masters of the situation so far as surface ships are concerned, but this will be useless if the enemy submarine campaign paralyses our lines of communications." The First Sea Lord urged that we should withdraw from Salonica, and ruthlessly stop the import of anything not essential to the life of the country.

¹ Paper, G.T.519, dated April 22, 1917.

² W.C., April 23, 1917.

³ Paper, 125 (6), April 25.

⁴ The original is in Convoy Records, Vol. 132, p. 81, M.05113/17, D.A.S.D.0298, April 26, 1917, to 1st Sea Lord, Convoys.

⁵ British ships—April 24, 8 ships, 29,449 tons; April 25, 9 ships, 33,672 tons.

¹ Scandinavian traffic was not included.

² Subsequently altered to 72, to be based on Lough Swilly 18, Queenstown 36, Plymouth 18. Continuation of Minute, *idem*, 119.

⁸ Memo. to 1st Lord, April 27; presented to Prime Minister at meeting of War Cabinet May 1, but the Prime Minister had already discussed it with the First Sea Lord on April 30.

No sooner had the decision been taken than orders went out for a trial convoy trip from Gibraltar. The S.N.O., Gibraltar, Vice-Admiral Bernard Currey, was ordered to collect ships for a period of four days; the convoy was not to exceed 20 vessels and would be ready to sail in 10 days' time, and Captain Hughes C. Lockyer, C.B., R.N., was appointed Commodore, 2nd class, and despatched to Gibraltar to command it.

293. Prime Minister visits Admiralty, April 30.—This was on April 30, and that same morning the Prime Minister went over to the Admiralty, and was in conclave there the whole day. Besides the First Sea Lord, he interviewed the Director of Anti-submarine Division (Rear-Admiral Alexander Duff); the Director of the Trade Division (Captain Richard Webb); and the Assistant Director of Operations (Captain Henry W. Grant). The business of convoy was already settled. "I was gratified to learn from Admiral Duff that he had completely altered his view in regard to the adoption of a system of convoy, and that the First Sea Lord shared his view, at any rate, to the extent of an experiment."3 The principal point, however, that impressed the Prime Minister after consultation with the First Lord and First Sea Lord was the necessity of a reorganisation of the War Staff, in which the First Sea Lord should become Chief of the Naval Staff, and should be entirely free from the necessity of devoting his attention to questions concerning the supply of material, and he suggested that a business man should be appointed to the Board to supervise all questions of material.4 "The weakest point of the system was the lack of a department whose special duty would be to think out and work large questions of policy under the First Sea Lord." He proposed, therefore, that the War Staff should be reorganised on lines somewhat similar to those in force at the War Office, with a D.C.N.S. and A.C.N.S. He recommended the institution of a statistical department.

The Prime Minister favoured the First Sea Lord's idea of mammoth ships, though the Shipping Controller was strongly opposed to it.

To ease the destroyer position, he authorised the First Sea Lord to draft a telegram to be sent to the Secretary of State for despatch to Japan to impress the Japanese Government with the seriousness of the shipping question, and to urge them to send additional destroyers to the Mediterranean.

294. Gibraltar Convoy, May 10.—By the end of the month, then, in which America entered the war, the measures which were to win the war at sea were well afoot. The seriousness of the situation was

fully appreciated by Admiral Jellicoe, and the plans for convoy were largely prepared by Commander Reginald Henderson in the Division which Admiral Jellicoe had himself created as soon as he came to the Admiralty as First Sea Lord.

Commodore Lockyer arrived at Gibraltar on May 7. A convoy of 16 vessels left in the evening of May 10. It was in three columns, and was escorted out to 11° W. by armed yachts. Heading the centre column was the Clan Gordon, flying the Commodore's flag. No submarine was encountered, and the station-keeping was "on the whole satisfactory." Devonport destroyers were to meet them on May 18 at 8 a.m., but, as the convoy was 20 miles west of the rendezvous, did not pick them up till 4 p.m. The west coast ships were detached with two destroyers off the Scillies, and dispersed off the Smalls on May 20. The east coast ships reached Plymouth on May 20, and sailed that evening. Off Poole they were met by 24 drifters, and, proceeding up channel in three divisions, arrived safely in the Downs on May 22. The trial had been an entire success, and from that moment it may be said that the submarine menace was conquered.

295. Atlantic Convoy.—The arrangements for a trial Atlantic convoy did not take shape so quickly. Captain Lionel Wells was appointed Commodore, 1st class, and Admiralty representative for organising convoys at Hampton Roads, with Commodore Haddock, R.N.R., to assist in the arrangements of a convoy from Sandy Hook1; but the U.S.A. Navy Department was strongly against convoy, and Admiral Benson particularly so. "They honestly thought the scheme of 20 merchant ships travelling together not a sound one."2 The idea of escorting it with United States destroyers was, therefore, abandoned. It sailed, however, from Hampton Roads on May 24, and reached the English Channel safely on June 7. Meanwhile, on May 15, a conference assembled in the First Sea Lord's room, and a committee was appointed to draw up an organisation for a general system of convoy. It consisted of Captain Horace Longden (Trade Division), Fleet Paymaster H. W. E. Manisty (Trade), Commander J. S. Wilde, Lieutenant Burton (Antisubmarine Division), and Mr. Norman Leslie (Ministry of Shipping) 3 So by the middle of May convoys were well on their way.

296. **Grand Fleet, April 9.**—Ignorant of all these big questions, German minesweepers in the Bight were patiently performing their laborious work day after day.

3 M.05981/17, May 17, in Convoy Records, 132/93.

¹ Sailing orders, draft, April 27; Ad. Tel. to S.N.S.O., Gibraltar, April 28, 1917, 1545.

² Convoy Records, Vol. 132.

³ Minute P.M. April 30. Official History, Vol. V, 20. ⁴ Sir Eric Geddes was appointed subsequently.

⁵ There were already eight Japanese destroyers there.

¹ Telegram, May 4, 1630, Convoy Records, 132/183 and 132/143.
² Gaunt to Admiralty, May 5, idem, 132/225. Admiral Sims (April 19) had reported that the British Admiralty was in favour of dispersion and considered it impracticable to merchant vessels to proceed in formation. Sims, 324, Appendix III.

By 1917 most of the minesweeping divisions consisted of the new "M" boats, but the long distance of 100 miles from Heligoland to the semi-circle joining Terschelling to Horn Reefs, on which most of the British minefields were laid in 1917, made it essential to escort the minesweepers to their work.

When, therefore, on April 7, at 5.39 p.m., the Senior Officer, Scouting Forces, ordered two barrier breakers² to proceed to a position in 55° 17′ N., 7° 21′ E., and thence to 55° N., 5° 45′ E., two German destroyers were told off to escort them. These orders were intercepted at Whitehall,³ and at 7.20 p.m. on April 7, Admiral Beatty was directed to send out not less than eight destroyers and a leader with a supporting force to intercept them.⁴ The destroyers were not to go east of longitude 7°. The "minebumpers" were described as grey steamers of 4,000 tons gross, armed with a few light guns.

297. The 2nd Light Cruiser Squadron and 13th Flotilla, April 9.— The Commander-in-Chief's orders went out that evening (April 7).⁵

The force was to consist of four cruisers of the 2nd Light Cruiser Squadron under Commodore Cecil Lambert, in the Southampton, screened by four destroyers, and the Champion (Captain James Farie) with eight destroyers of the 13th Flotilla. Its object was to intercept a group of armed "minebumpers," which were leaving a position in 55° 17′ N., 7° 21′ E., at 1800 G.M.T., April 8, steering for position "B" in 55° 39′ N., 5° 45′ E., steaming 10 knots. The British force was to sail in time to arrive at "B" by 9 p.m. G.M.T. on April 8. The destroyers were to be spread in divisions and within supporting distance, and, after passing position "B," were to steer for position "A" in 55° 17′ N., 7° 21′ E., with the light cruisers in support.

The orders were quite clear. The British forces were to sweep down the line of the German advance; they were not to proceed east of longitude 6° 50′ E.; and between 55° 34′ N. and 55° 50′ N.8 not to go east of 6° 30′ E. (Plan 34.)

The force left Rosyth about 1 a.m. on April 8, and at 4.30 p.m. Commodore Lambert made a signal which was to affect considerably the whole operation.

"At 1730, alter course to S. 26 E.; speed, 14 knots. At 2100, alter course to S. 57 E.; speed, 10 knots. At 0045, alter course 16 points and adjust speed so as to arrive at rendezvous "B" at 0400. Keep destroyers well closed up during the night. Let me know if you sight Noord Dogger Bank Light. 2nd Light Cruiser Squadron will be approximately 3 miles to the westward of you during the night."

These orders for alteration of course were evidently based on dead reckoning and on the assumption that at 5.30 p.m. the force would be in about 56° 18′ N., 4° 49′ E. Actually, the *Champion* seems to have been some 10 miles to the northward of her dead reckoning, and it was 8.07 p.m.² before she found the Dogger Bank L.V. abeam $4\frac{1}{2}$ miles—nearly half-an-hour later than she must have expected it. She reported it to the Commodore at 8.31 p.m.³

It was clearly laid down in the Operation Orders that the force was to arrive in position "B" by 9 p.m. This was a good 24 miles from the 8.07 p.m. position, and to arrive there at 9 p.m. the Champion would have had to continue on her course at 14 knots till 9.53 p.m. Instead, she adhered rigidly to the courses and times made by the Southampton at 4.30 p.m.; at 9 p.m., she altered course to S. 57 E., and proceeded to run down on a line which ran some 12 miles to the northward of the German line of advance. At 9.17 p.m. she received a signal from the S.O., 2nd Light Cruiser Squadron to steer for a point 5 miles east of rendezvous "B," so as to keep clear of him. 5

The Southampton sighted the Noord Dogger L.V. in her turn at 7.45 p.m.; she evidently appreciated at once the error in dead reckoning, for she held on for an hour and did not alter course to S. 57 E. till 10 p.m. She was then some 5 miles to southward of position "B." The night was overcast, with a visibility of only 2 miles till 2 a.m., when it increased to three or four. The forces were too far apart to intercept the German vessels, and the possibility of doing so was still further diminished by Captain (D) omitting to spread his destroyers.

Minensuchboote—410 tons, 16 knots, draught 2 metres, Uberwasser-streitkrafte, 123.

² Sperrbrecher, for mine bumping.

³ War Diary I.D.1027/24, April 7, 1914,1737, Befehlshaber der Aufklarungstreitkräfte.

⁴ H.S.645/236, 238, 240, 242.

⁵ H.S.875/120.

⁶ Usually called barrier breakers (German "sperrbrecher").

⁷ Operations Orders, H.S.875/120.

⁸ Evidently on account of mines (G.F. Mine Memorandum).

¹ H.S.875/109, but "during the night" omitted in *Champion's* copy (H.S.875/118.)

² Instead of 7.36 p.m.

³ H.S.875/118.

⁴ The Champion at 2050 gave her position at 8 p.m. as 55° 28' N., 5° 18' E., evidently pos. obs. from Noord Dogger. H.S.875/119 (from Champion's Signal Log.

⁵ H.S.875/119.

⁶ Chart in H.S.878/39. Commodore's report H.S.875/93.

Further, on account of his position to the northward, he found himself heading for the longitude limit 6° 30′ E., and had to turn back¹ at 0030 instead of 0045.

The force returned on the night of April 9. It had seen nothing but a couple of Dutch smacks. The Commodore sent in a report, April 11.² He stated that he thought the Noord Dogger Light Vessel must be considerably to northward of its charted position. He was unable to understand the courses steered by *Champion*, which did not agree with those plotted on her chart. He maintained that had she complied with the signal made at 1630 she would have arrived at "B" at the time ordered in the Commander-in-Chief's memorandum. Actually, the position of the North Dogger L.V. turned out to be right.³

A court of enquiry sat in the *Princess Royal* on April 13 to enquire into the discrepancies between the *Champion's* report and her track, and as to the formation and speed of the destroyers. The Court found that there was inaccuracy and lack of care in working out the track for Captain Farie.⁴

It considered, however, that Captain Farie was justified in expecting orders to spread his destroyers by reason of the proximity of the minefield area on his port hand and of the 2nd Light Cruiser Squadron within about 3 miles, roughly, on his starboard quarter.⁵

On this finding, Commodore, 2nd Light Cruiser Squadron, remarked that the order to spread the destroyers was in the Commander-in-Chief's memo., and required no further orders. In his opinion, neither the Court nor Captain Farie appeared to realise the undesirability of using wireless close to an enemy's coast. As for the signal at 4.30 p.m. to keep destroyers closed up, it referred merely to the straggling of destroyers in the rear at the moment.⁶

H.S.875/93.

The principal question at issue was whether the *Champion* was right in following the courses made at 4.30 p.m. by the Commodore before the D.R. position was amended by the North Dogger L.V.

The Commander-in-Chief, in his report (April 16), considered that it would have been better if the Commodore, after obtaining his position from the Dogger Bank L.V., which there was no reason to suppose was out of position, had amended his former instructions, but he did not wish to make further wireless signals; as no alteration was made in the instructions, Captain (D) concluded that they remained in force. In so doing, the Commander-in-Chief considered that the Captain (D) showed a lack of appreciation of the situation; he had a copy of the Operation Order, from which it was quite clear that the object was to be on the line B-A in order to intercept the enemy.

As regards the dispositions of the destroyers during the night, it was definitely stated in the Operation Order that they were to be spread, and the Commander-in-Chief considered that Captain (D) should not have read the Commodore's signal to keep closed up as annulling this order. Captain (D) knew the object of the operation, and "it was manifestly absurd to follow the letter of the signal and not the spirit." The Admiralty decision is dated April 25. Their Lordships concurred entirely in the reasons "for the failure" given by the Commander-in-Chief, and directed the Rear-Admiral, 2nd L.C.S., and Captain (D) to be informed "that the failure was very regrettable."

Though the operation was not one of great importance, it may be quoted as an example of the necessity of a definite datum point (in this case the Noord Dogger Bank) whose position must, if possible, be verified.

298. British Minelaying, Heligoland Bight, March and April.—
The whole question of British minelaying in the Heligoland Bight came up for review in the middle of April. Throughout March and the first half of April, the laying of the fields in scattered groups round the fringe of the Bight had continued. During March,• 2,560 mines had been dropped in seven fields, but the policy of laying fields "in driblets" was criticised by Admiral Beatty in his notes for the conference that took place at Rosyth on April 14, 1917. He considered that his plan for mining the Bight with large fields, each laid in one operation, had not been executed, and attributed this to the lack of a staff system in Whitehall. He suggested that there was "no planning body," and "no executive authority, by which decisions could be obtained and instant action follow." It was not possible, however, immediately to alter the system at a stroke.

3 H.S.A.141/170.

¹ This indicates that the *Champion* appreciated she was to northward of the line AB. Enquiry (Q.4) in H.S.875/113.

³ Its position was checked shortly after by the Royalist and Blanche and found to be practically that given in Notices to Mariners, viz., 56° N., 5° 25′ E., H.S.875/126.

⁴ Champion's report (April 10) in H.S.875/107; track in H.S.838/37; Enquiry, H.S.875/112; the following are the courses (magnetic) of the report with the courses (magnetic) of the track in brackets: 2100, S. 57 E. (S. 57 E); 0030, N. 69 W. (N. 69 W.); 0230, N. 57 W. (N. 22 W.); 0315, S. 57 E. (S. 39 E.); 0415, N. 57 W. (N. 24 W.). In the Court of Enquiry there seems to be, however, a further error. A navigating officer gave the actual course at 0415 shown on Champion's track as N. 39 W. He must have meant N. 39 W. (true). On the chart (H.S.838/37) it is N. 37 W. (true), that is N. 24 W. magnetic.

According to the final track chart sent in by Commander-in-Chief (H.S.878/39), the 2nd Light Cruiser Squadron was some ten miles on the beam of the 13th Flotilla.

⁶ Its wording was "Keep destroyers well closed up during the night" in 2nd L.C.S. copy. H.S.875/109.

¹ i.e., the signal of 4.30 p.m.

² M.04811/17, H.S.875/125. Captain Hugh Tweedie was appointed Captain (D) 13th Flotilla.

The mines were not there. In the spring of 1916, the then First Sea Lord (Admiral Sir Henry Jackson) had given orders for the manufacture of a mine which was to be an exact copy of the German mine, but attempts had, unfortunately, been made by departments to improve on it, and much time had been lost.¹

During April, 2,997 mines were put down in 12 fields, varying in size from 19 to 1,308 mines. One of the fields, at least, proved most effective. Laid by the Royalist, Blanche, and Abdiel on the night of April 18-19 about 15 miles south by west from Horns Reef Light Buoy, it consisted of 155 B.E. and 80 Service mines. The mines were laid 20 to the mile in lines 1.3 miles long with a gap of half-a-mile between the ends of the adjacent lines. This was an entirely new pattern, which made minesweeping extremely difficult, and proved so successful that, with modifications, it was used in the Bight until the end of the war. The field should have been laid athwart one of the German "routes," but, according to information received of the enemy's sweeping operations, it was laid 4 or 5 miles to the south-west of its charted position, and its northern end. therefore, must have been clear of the swept channel. It was discovered on April 30, 1917, when a minesweeping vessel was sunk in its southern portion.2 On May 13, a German armed trawler, the Fulda, was mined and sunk on its northern side. Next day, May 14. it claimed a more important victim. This was the submarine U.59. which was sunk in 55° 20' N., 7° 12' E., some 2 miles north-north-west of the wreck of the Fulda. Vigorous minesweeping followed, and by May 20 the field was considered clear, and systematic sweeping ceased. In September, 1917, the position was again swept, an operation which lasted some six days, but no more mines were discovered, and the route just to the north was used without accident until February. 1918. On the 2nd of that month a group of armed trawlers escorting a submarine came to grief on it, and no less than four of them were sunk.3 Next day, February 3, three more, the Flensburg, Weddingen, and Brockeswald, also fell victims to the same field; but two of them were apparently able to get some distance away, for the Weddingen sank about 35 miles south of the field and the Brockeswald 7 miles to the north.

More sweeping followed, but mines were again reported on May 15 by a minesweeping group, and on August 12 by an aeroplane. Nothing more was heard of this field, and presumably it was finally cleared.

299. Anti-Zeppelin Patrols, April 20-28.—Early in April a proposal was put forward for the mining of the gap between the Vyl Light Buoy and shoal, and it was suggested, too, that when

¹ First Sea Lord, May 2, 1917.

3 Annaliese, Kleiss, Rheinfels and Seestern.

this had been done a succession of fields might be laid between it and the Horns Reef Light Buoy.¹ The Commander-in-Chief knew that Zeppelins, except in strong easterly winds, were accustomed to patrol shortly after daylight between Horns Reef and a position in 55° N., 6° E., some 60 miles to the south-westward of it, and on April 18 he issued orders for the *Campania* to sail from Rosyth, screened by three destroyers, and supported by two light cruisers and four more destroyers, to attack them.

As a result of his strictures on the system hitherto in force, it had been decided on April 17 to make an attempt with the mine-laying forces in the Humber and Forth at more concentrated minelaying in the Heligoland Bight, and the *Campania* and her escorting forces were warned that British minelayers would be returning from positions in the Bight to the Humber and Firth of Forth on the 19th and 20th.

At 8 a.m. on the 19th the Sydney and Dublin (2nd Light Cruiser Squadron), with the Campania and seven destroyers, sailed from Rosyth; but a thick fog had settled over the Bight, and at 11.22 a.m. the Admiralty ordered the Commander-in-Chief to postpone the operation for 24 hours, and he accordingly recalled them.2 For similar reasons, in the Humber, the minelayers Ariadne, Angora, Wahine, and Princess Margaret and their supporting force at Harwich, consisting of the 5th Light Cruiser Squadron with the seaplane carrier Vindex and destroyer escort, were held up for 24 hours. Next morning, April 20, the minelayers sailed from Spurn head with nine destroyers, and that night some 55 miles south-south-west from Horns Reef laid a large field3 of 1,308 mines, stretching over some 14 miles north-east and south-west-the largest minefield laid in the war. The Campania and her supporting force had sailed again from Rosyth that morning (April 20), while Commodore (T), in the Centaur, with five light cruisers, the Lightfoot, Vindex, and nine destroyers, had set out from Harwich.4

During the afternoon the weather broke, and the Admiralty, knowing that no Zeppelins would be out, ordered the whole force back at midnight.

On April 24, the Commander-in-Chief proposed to repeat the operation. This time the seaplane carrier *Manxman* was to take the place of the *Campania*, and was to be provided with a much larger escort. In a letter from the First Sea Lord, the Admiralty had suggested to Admiral Beatty that it might be desirable to demonstrate off the coast of Jutland, and the Commander-in-Chief, therefore, proposed to send two light cruisers, screened by destroyers, into the Skagerrak, and to station the battle cruisers off the Little Fisher Bank

² It possibly caused the loss of U.C.30 on April 20. See S. 340.

¹ Lockhart Leith/230.

² H.S.410/79, 127, 281.

Lockhart Leith, Bight, Field 68, in chap. VIII.
 H.S.409/1159: H.S.410/462, 644, 675, 1200; H.S.A.332/554

to support them.¹ Nothing was said as to the object of the demonstration, but it was presumably to cover the operations of the minelayers Angora, Wahine, and Princess Margaret, which laid another big field² of 1,000 mines some 60 miles to the north-west of Heligoland on the night of April 27–28, while Commodore (T) cruised with the 5th Light Cruiser Squadron, Vindex and destroyers to the northward of Terschelling.³ The Rosyth forces, too, were to have sailed on the 27th, but, as before, their sailing had to be postponed for 24 hours on account of the weather.⁴ The weather moderated, and they sailed at 5 a.m. on the 28th, followed later by the battle cruisers; but on the 29th the weather again became very bad; the destroyers could not keep up, and the light structures in the Manxman were damaged.⁵

Although conditions were bad and no Zeppelins had been reported, two aeroplanes went up from the Manxman early on the 29th. They met with no success. In less than an hour the destroyer Patrician had picked up the pilot of one. The other, unknown to the British force, had to make a forced landing on the Danish coast. For some 3½ hours the British ships waited for its return, and then two light cruisers and four destroyers went off to search for it. They swept south for 10 miles, turned east for 8 miles, and then, after sweeping for an hour to the north, discontinued the useless ssearch, and in company with the whole force returned to their base.

300. Admiral Bacon's Plan to Attack German Destroyers off Zeebrugge.—In the south the most important event during April was the German destroyer raid on the Dover Straits, which was carried out on the night of the 20th-21st. German destroyers had thrice raided the Dover barrage and the Downs, with considerable success and with complete immunity to themselves. On October 26, 1916, they had sunk the Flirt and a number of drifters, destroyed the transport Queen, and damaged the Nubian. Again, on March 17, 1917, they had sunk the Paragon and the S.S. Greypoint, damaged the Llewellyn, and driven the drifter Redwald ashore. To deal with these raids a strong force of destroyers had been permanently transferred in March, 1917, from Harwich to the Dover Command. for, in Admiral Bacon's opinion (March 16), a single serious reverse would do much to damp their ardour. He had no intention, however, of sitting down and waiting patiently for another attack, but planned a raid on the German flotilla off its own base. On

¹ H.S.411/951.

March 24–25, the 3rd Flotilla, consisting of the 5th and 6th Half Flotillas, had moved from Wilhelmshaven to Zeebrugge. Admiral Bacon knew from his aeroplane reports that whenever a British air raid was in progress near Ostende a German trawler, outside the harbour, threw a beam of light into the air, and the destroyers at Zeebrugge put to sea and scattered. He decided to attack them, and issued his orders accordingly. They are contained in a memorandum dated April 6.* A strong and prolonged air raid was to be carried out on the first suitable night; some 15 minutes before its start four coastal motor-boats were to be 4 miles off Zeebrugge, and were to close that port at slow speed as soon as the raid started. They were to be specially warned to avoid the patrols as much as possible, and to devote all their efforts to destroyers. The necessary motor-boats, Nos. 4, 5, 6, and 9, were available, and it only needed suitable conditions to carry out the attack.

301. The Attack off Zeebrugge, April 7.—Admiral Bacon had not long to wait for an opportunity. The very next night, April 7, a gentle breeze from the north-east and a slight lop combined with a bright moon under a clear sky, gave him apparently ideal conditions for his purpose. The destroyer Falcon, therefore, sailed at dusk on the 7th, and anchored off the eastern end of the banks off Dunkirk ready to support the four motor-boats-No. 4, Lieutenant W. N. T. Beckett, R.N.; No. 5, Act. Lieutenant F. C. Harrison, R.N.; No. 6, Lieutenant A. Swann, R.N.V.R.; No. 9, Lieutenant Dayrell Reed, R.N.R.—which, under the command of Lieutenant Walter N. T. Beckett, left harbour at 8.15 p.m.. After leaving Zuidcoote Pass they encountered a choppy sea, which washed them down continuously. Lieutenant Beckett, however, held on, and proceeded to a position some 2 miles east by north from the end of Zeebrugge Mole. Presently he observed, silhouetted in the moonlight, the dark outlines of four enemy destroyers. They were apparently lying at anchor, heading west, with the westernmost destroyer about a mile north of the end of the Mole and the others, some four cables apart, on a line to the eastward. Lieutenant Beckett circled round to keep the westernmost one between himself and the moon, and then attacked, firing his torpedo at a range of 600 yards. It missed, and probably passed inside the Mole. Three minutes later, as he put out to sea again, he saw and felt a heavy explosion. This was the work of Lieutenant Dayrell Reed, R.N.R., in boat No. 9, who had sighted three of the destroyers. He was about 1,000 yards astern of Lieutenant Beckett, and he, too, attacked the westernmost destroyer. He had the satisfaction of seeing his torpedo hit her under her after funnel, and saw her list heavily to port. Lieutenant F. C. Harrison, in boat No. 5, then came upon the scene. He had held back to allow his companions to carry out their attacks, and as soon as they had passed he endeavoured to work up to full speed.

² Field 93, about 12 miles to the southward of the field laid on April 20.

³ 54° and 55° N., 3° 30′ E.

⁴ H.S.412/764, 785. ⁵ H.S.A.332/558 ff. M.05629/17.

⁶ M.05629/17.

⁷ H.S.413/894, 955, 1148.

But his boat had been severely battered by the sea, and his engine was running badly. He closed the third destroyer of the line. but when within 400 yards decided, on account of his slow speed, not to attack at once. He, therefore, turned 16 points, and went slowly out to sea. After going half a mile he turned back again; his engine was getting rapidly worse. He let go his torpedo at 700 yards and observed a heavy explosion. He had turned away on firing, and a minute or two later his engine stopped. The easternmost destroyer picked him up in the beam of her searchlight, and fired four or five badly aimed salvos in his direction. His mechanic, after desperate efforts, got the engine running again, and, passing out of range, he made after his consorts. Lieutenant Swann, R.N.V.R., in boat No. 6, now attacked, but his engine, too, was giving trouble, and his torpedo, like that of his leader, went wide. The motor-boats reached Dunkirk the next morning with their crews utterly exhausted. But they had taken the Germans by surprise, and sunk one destroyer. She was G.88,2 of the 3rd Flotilla.

302. German Raid on Dover, April 20, 11.30 p.m.—A fortnight later the German 3rd Flotilla struck back at the Straits. Its orders are dated April 19. The force was to consist of 12 boats in all in two groups of six. Its object was the destruction of patrol vessels on the barrage, and that failing, a vigorous bombardment of Dover and Calais. On the ground of experience of previous raids, it had been decided to institute a general direction of the operations from the headquarters (Generalkommando) at Bruges, where the reports of the two groups and British wireless messages and orders, so far as they were decipherable, could be collated with the greatest convenience and despatch.

This direction was to be exercised by Kapt. Leutnant Kahle.

The Dover side of the Straits was to be attacked by Lieut.-Commander Gautier with S.53 (leader), V.71, V.73, V.81, G.85, and G.42 (5th Half Flotilla and one boat of 6th Half Flotilla); the Calais side by Lieut.-Commander Konrad Albrecht with V.47 (leader), G.95, V.68, G.96, G.91, and G.70 (Zeebrugge 1st Half Flotilla and two boats of 6th Half Flotilla). These were all the latest craft of 34-knotters armed with 4·1-in, guns.

The forces got away at 6.20 p.m., April 20. Gautier was directed to make a well-known buoy—Tonne 2501—in 51° 21′ N., 2° 7′ E., and pass north of Sandettie Bank. Albrecht, some 6 miles to the eastward, was to pass south of Sandettie, and make for a position

some 7 miles north of Calais. At 10.20 Gautier was off buoy No. 2¹; he must have passed the barrage about 10 p.m. not far from buoy 7A. The Calais group, well to the eastward, probably passed the barrage somewhere near buoy 13A. (Plan 37.)

303. **Dover Disposition, April 20.**—The attack had all the elements of surprise. The Admiralty had not observed any indications of it, and Admiral Bacon had received no special warning. During the day four of his destroyers, the *Nugent* (Commander E. L. Cardale), the *Matchless, Morris* (all 34 knots, three 4-in.), and *Amazon* (33 knots, two 4-in.) had been spread out patrolling sections of the barrage. At dusk, in accordance with Admiralty directions² for concentration at night, they closed to take up their night formation, and under Commander Cardale to patrol on the Calais side of the Straits between barrage buoy 7A and Calais. A little later two flotilla leader boats, the *Swift* (Commander A. M. Peck, R.N.) and *Broke* (Commander E. R. G. Evans, R.N.³) arrived from Dover and took up their night patrol between the South Goodwin light and barrage buoy 5A.

Other forces were ready at Dover and in the Downs.

In the Downs, whose defence had been recently strengthened by shore batteries at Foreness and the North Foreland, the monitor Marshel Ney (six 6-in., two 3-in. A.A.), recently re-armed with 6-in. guns, lay as a guardship with guns at the "ready." She had been attacked and missed only the day before (April 19) by a torpedo plane. The Downs division for the night consisted of the light cruisers Carysfort (three 6-in., six 4-in., 28½ knots), Active (ten 4-in., 25 knots), the destroyers Laertes, Laverock (both three 4-in., 29 knots), and Afridi (two 4-in., 33 knots). These were lying ready to slip.

Off Margate were three of the older 30-knotters—the Falcon Racehorse, and Crane (all one 12-pdr., five 6-pdr.)—with P.50 (one 4-in., 22 knots) and T.B.15. Finally, in reserve at Dover lay the 1st Division of six destroyers in two subdivisions—the 1st Subdivision consisting of the Myngs, Miranda (three 4-in., 34 knots), and Saracen (two 4-in., 33 knots); the 2nd Subdivision, Mentor

¹ From west to east.

² Mittler/37. H.S.A.301/477 ff.

^{3 &}quot;gegebenfalls."

^{4 &}quot;Gesamtleitung."

¹ Tonne 2. The German position for it was 51° 8′ N., 1° 38′ E. This was Area Buoy No. 2 (laid by Admiral Hood in 1915 for the net drifters) actually in 51° 7′ 30″ N., 1° 37′ E., and should be distinguished from Buoy 2A in the barrage. Note.—The Plan in Official History (vol. iv, p. 371) shows the Barrage as relaid in June, 1917, with the angle smoothed out. See Appendix L.

² A.L. of February 8, 1917, N.L.2/11848/16 in H.S.A.308/224.

³ Swift, 1905-06, 2,207 tons, 35 knots, one 6-in., three 4-in.; Broke, 1914, 1,794 tons, 32 knots, six 4-in.

⁴ V.A. Dover, April 22, 1917, in X.8051/17. The attack was made by four planes at 7.40 a.m. A torpedo was also fired at s.s. *Nyanza* and armed drifter *Carol Bank*.

⁵ Mentor, Signal Log, 33003.

(three 4-in., 34 knots), Lydiard and Lucifer (three 4-in., 29 knots). These were all ready to slip. This was the disposition on the Dover side.¹

304. Calais, 11.15 p.m.—The evening was clear and calm when about 11.15 p.m.² Albrecht, who had made for the green light buoy off Calais,³ arrived off Calais and suddenly opened fire. He fired some 300 shots "into France," and then apparently made off. The Swift and Broke were patrolling from a point 1½ miles south-west of 5A buoy to a point 1½ miles south-west of the South Goodwins. They were proceeding west,⁴ and were in 51° 9′ N., 1° 34′ E., 4 miles west-south-west of 5A buoy, when, at 11.17 p.m., they saw gunflashes lighting up the night to the south-east. Commander Peck, thinking the Nugent was engaged, turned and made for them at full speed. He had gone some 5 miles when, at 11.30 p.m., a signal came in from the Nugent reporting the same flashes south-south-east. It was clear that the Nugent was not engaged, and the Swift turned round and made to the north-westward towards the South Goodwin to resume her patrol.

The movements of the *Nugent* and her destroyers are obscure. She was apparently on her patrol (or a mile or two westward of it), going north in 51° 6′ N., 1° 44′, 5 when she sighted flashes S. 15 E. This is all that is recorded of her. 6

305. Dover, 11.30 p.m., April 20.—It was 11.30 p.m. Commander Peck had just turned to get back to his patrol when he saw gunflashes far away to the westward in the direction of Dover. This was Commander Gautier's six boats which arrived off Dover at 11.28 p.m. An armed trawler, the Sabreur (Skipper Robert Scott), was patrolling

¹ See V.A., Dover, March 24, 1917; M.03644/17.

there, and at 11.30 p.m. was about 2 miles south of Dover¹ (heading north-west). The night was pitch dark, she had seen nothing, when suddenly a shell burst in front of the wheelhouse. The next moment she was wrapped in a storm of shell, while star shell bursting over her threw an eerie light on the scene.

The burst of fire came from Gautier's boats, which were going north-east, firing "into the trawler's port side" at a range of about half-a-mile. The little trawler was as fortunate as she was sensible. Dowsing every light at once she made off to the westward, and suffered hardly any damage. Gautier's proceeded "to pump iron blindly into the county Kent," and, after firing 350 shots and doing a couple of pounds' worth of damage, returned at half-speed (15 knots) to buoy No. 2,4 which he reached at 12.18 a.m.

306. At Dover, Fortress Guns.—At Dover proceedings were complicated by a question pending at the time between the Vice-Admiral and the General Officer Commanding. On April 2, Admiral Bacon had asked the G.O.C. that, in the event of enemy destroyers appearing off Dover, the coast defence guns should not fire, unless the Vice-Admiral should specifically ask them to do so, so as to give the Dover destroyers a chance to get out and attack. But the Brigadier did not want his guns "to be placed under the orders of the Navy," and had referred the matter to the Eastern Command, and so it passed to Home Forces and thence to the Admiralty. The Vice-Admiral wished to safeguard his vessels, but the General did not wish hostile vessels to be within the range of his guns without being fired at.5 Arrangements had been actually made for a conference on the question at the Admiralty on April 19, but it had been postponed, and the next day the Germans presented the conference with a concrete case.6

307. **Destroyers, Midnight, April 20.**—What happened at Dover is not very clear. When the firing opened the destroyers were ordered (at 11.35 p.m.) to slip and leave harbour, but not to proceed

² Admiral Bacon's report (M.05014/17) says about 11.10 p.m.; Swift 11.17 p.m.; German report (Albrecht) 11.15 to 11.20 p.m.

³ "Grüne Tonne von Calais." This was in 51° 1' N., 1° 50' E., in October, 1916.

⁴ At eastern end at hours; western end at half hours (Commander Peck, Enquiry, Q.2), Signal, Swift to Nugent, 8.15 p.m., "South and East at hours" Nugent Signal Log, 33008).

⁵ Four miles N.N.W. of No. 5 Buoy. Nugent to V.A.D.P. 0005. (Broke's Signal Log, 33505). Note.—This is No. 5 Area Buoy in Lat. 51° 3′ N., 1° 47′ E.

⁶ Nugent's deck log (N.316) says "12.15. Observed flashes S. 15 E., altered course to investigate. 12.28. Resumed special patrol." None of the logs (Nugent, Morris, Matchless, Amazon) show any courses; none of them show any alteration in their speed of 14 to 15 knots. The Amazon mentions that she went to action stations at 12.20 (i.e., 11.20 p.m. G.M.T.) but the only other item of information, viz., that she lost one Webley revolver overboard, does not throw much light on the darkness of the night (Amazon's Log, A.817).

¹ 1½ miles S.E. of the *Maloja* wreck marking vessel. The *Maloja* (12,431 tons) was mined on February 27, 1916; her wreck lay in 51° 5′ 20″ N., 1° 18′ 50″ E. with a wreck marking trawler 1 cable to northward, i.e. 1¼ miles S.W. ¼ W. from Dover West Pier. Home Waters VI/67; H.S.216/484, 535.

² One hit on engine room casing, one shell in stokehold, damage by shrapnel to gear on deck, one man injured. Sabreur report, M.05014/17.

³ Damage to stable and stone wall at Elms Farm.

⁴ Prisoners' report—" proceeded S.W. for 10 minutes then N.E. by E. towards No. 2 Buoy" (C.B.01313).

⁵ Chief of War Staff, April 11, 1917.

⁶ G.H.Q. Home Forces, April 10, 1917, M.04368/17, in Field Officer, April 10, 1917.

without orders. The Miranda prepared to slip. The guns on the breakwater opened fire. The order to slip was cancelled.

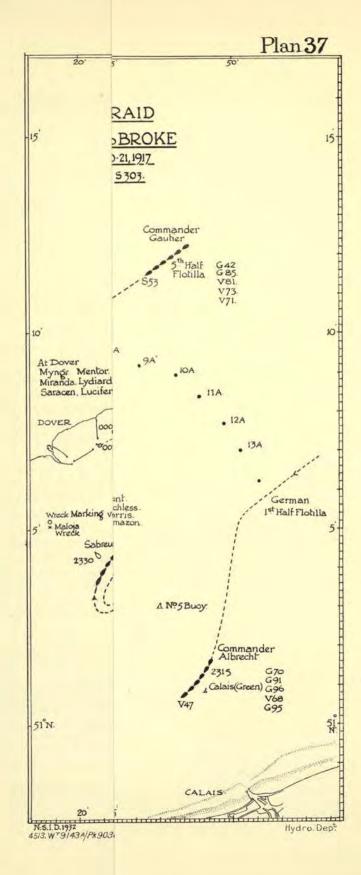
Five minutes later (11.45 p.m.) the First Division was again ordered to slip.⁴ By that time the bombardment was over, and the German destroyers had retired.

By midnight, or shortly after, the *Myngs*, *Miranda*, and *Saracen* had slipped, and, after leaving harbour by the east entrance, were proceeding N. 80 E., 10 knots, for the South Goodwin. One of the principal difficulties confronting destroyers on patrol was to distinguish between friend and foe, and Captain (D) was careful to warn the *Swift* at 12.15 a.m. that he was patrolling with the First Division from the east entrance to South Goodwin L.V.

The 2nd Subdivision left later. The Lydiard and Lucifer had cast off by midnight, but it was not till 12.25 a.m.⁵ that they passed the east entrance with the Mentor, and shaped course S. 80 E.

By 12.30 a.m. all the six Dover destroyers were out, but the two subdivisions had got separated. The ships in the Downs—Carysfort, Active, Afridi, Laertes, Laverock—were still at anchor in the small Downs.

By that time things had quietened down. Admiral Bacon had asked the Swift whether she had seen anything of the enemy. Hearing that they had not been sighted and knowing that they had had ample time to escape, he ordered the First Division to return to harbour. The Myngs, Miranda, and Saracen, which were then somewhere off the South Goodwin, turned back. The Mentor (Lieut.-Commander Arthur J. Landon), who had only just left harbour, went on for some minutes. He had turned to obey the recall at 12.38, and at 12.45 a.m. was making for the eastern entrance with the Lydiard and Lucifer, when a dramatic change came over the situation. Heavy gunfire on the port quarter. He turned and made for it at 25 knots. The Swift and Broke were in action.



¹ Miranda (Signal Log) 36162, 11.35 p.m.

² Lucifer log, 11.30 p.m.; Lydiard log, 11.30 p.m.

³ Captain (D) to First Division. "Negative Slip," Miranda (s) 11.43 p.m., Lucifer (s) 11.40 p.m. General to Destroyers, "First Division Slip," Miranda (s) 11.45, Mentor (s) 11.45.

⁴ General to Destroyers, First Division Slip. Go outside but do not proceed without orders, 11.45 Mentor (s).

⁵ Lydiard (1), The Mentor, at 11.30 p.m. had called the night boats crew away to take defects ashore. Mentor (1).

⁶ It is not clear from records where Captain (D) (Captain Percy Withers) was—presumably in the Mynes.

⁷ From the logs none of them moved the whole night. Active was in Small Downs, 13 miles N. 29 E. of Deal Pier; Carysfort was 1 mile S. 87 E. from her; the assigned place for the Harwich light cruiser was N. 28 E. 19 cables from Deal Pier. Active called Carysfort's attention to this at 6.52 p.m. Active (s) 33518.

⁸ Myngs (w) (33007) V.A.D.P. to Captain D.6. "Return to Harbour," 0025; Miranda (s) (36132), received 12.28 p.m.

⁹ She may have actually entered.

308. Midnight, April 20–21.—By midnight the Swift and Broke (s. 306) had got back at the barrage not far from 3A buoy. Everything was quiet again, and Commander Peck eased to 15 knots. Just then came a signal from the Vice-Admiral to ask if he had seen enemy destroyers, and Commander Peck replied "No." At 12.19 a.m. came Captain (D)'s warning that he was out patrolling between Dover and the South Goodwin, and Commander Peck made a "short leg" to the eastward¹ to keep clear of him. Gautier arrived off No. 2 buoy at 12.18 a.m. He was ahead of time, and decided to make towards the Downs to attack any forces coming out.² He turned to the westward, therefore, for some 4 miles. The night was cold and dark as pitch. Nothing in sight.³ About 12.36 a.m. he turned for home. His six boats were in two subdivisions, apparently in quarter line. Ahead were V.71, V.73, V.81. In rear, S.53, G.85, and G.42.

 $\begin{array}{ccc} S.53 \Rightarrow & V.71 \Rightarrow \\ G.85 \Rightarrow & V.73 \Rightarrow \\ G.42 \Rightarrow & V.81 \Rightarrow \end{array}$

They had seen nothing, a fact which lulled some of his boats into a feeling of false security, for in G.42 the guns' crew appear to have fallen out at 12.30 a.m. A couple of hours would see them back at Tonne 2501. Zeebrugge at dawn as usual.—Gott sei dank. This time, however, things were not to go just "according to plan."

309. "Swift" and "Broke," 12.45 a.m., April 20.—At 12.454 the Swift and Broke had resumed their patrol, and were steaming westward at 12 knots. The night was calm⁵ and very dark, and the Swift was burning shaded sternlights. The Broke was 1½ cables astern. Suddenly, on the port bow, destroyers loomed up—three, four—steering roughly east-south-east. No time for challenging. Commander Peck jambed his telegraphs to full speed, gave the order to open fire, and put his helm hard a-starboard. The 6-in. gun roared out a challenge of its own; at the foremost tube the gunner, Mr. Henry Turner, fired a torpedo⁶ on the port beam. The flash of the 6-in. gun blinded Commander Peck "entirely."

¹ Apparently when he received Captain (D)'s signal, Commander Peck was about 2 miles from the South Goodwin going west and turned east.

^{2 &}quot;In der Absicht auslaufende Seestreitkrafte anzugreifen."

³ According to the German account Gautier sighted a destroyer at 12.38 and opened fire on it. This is not corroborated in any English report.

⁴ The exact time is important if the movements are to fit in. Peck "at 12.45"; Evans "about 12.45"; German prisoners, 12.40 a.m.; Mentor (log) flashes, 12.45; German report, 12.44 a.m.

⁵ But G.H.Q. (Intell.) says "a squally N.W. wind blowing with a moderate sea."

⁶ Swift's first torpedo. It evidently did not hit.

V.81, the rear boat of the leading group, fired a torpedo at the Swift, and saw her pass a short distance astern. A shell hit the Swift in the stokers' mess deck.

Commander Evans, in rear, saw some five destroyers crossing ahead, and went on to full speed. When nearly abeam, the *Broke* fired a torpedo at the second destroyer (V.73), which missed. Then the first group vanished in the darkness, apparently circling round to north-west. (Plan 38.)

A minute or so later the second group suddenly looms up: S.53 is its leader, and gets a hit on the port side of the Broke's forecastle, exploding a shell which knocks out P.2 gun's crew. The Swift puts her helm hard a-starboard, and passes a few yards astern of G.85. Fred Marshall, A.B., fires the Swift's port after tube at a destroyer 300 yards on the port quarter. A heavy explosion follows. It is 12.50 a.m. G.85 is hit at this time, and brought to a full stop. Commander Evans has passed under the Swift's stern. The rear destroyer is coming up. Hard a starboard. The Broke crashes into her abreast of the after funnel. She is 6.42, and they remain locked together for half a minute or so. She is firing; so is S.53, which has circled round to starboard, and gets another hit on the Broke's bridge, killing the signalman of the watch and wounding the Chief Quartermaster. The Broke is slewed right round to port by G.42, and is now heading north-east. G.85 is on her starboard side and the Broke lets go her second torpedo at her from the starboard after tube. It may have hit. Then two shells from S.53 hit the Broke abreast the boiler room, destroying the main steam pipe and killing ten stokers. A fire of cordite is blazing in the Broke. She clears the wreck of G.42. All her guns except one are out of action, but with that one she maintains a steady fire, and keeps S.53 at bay. The Swift catches a glimpse of two destroyers,2 and goes off to the eastward in chase. The Broke is well clear of G.42, and approaches G.85, which is burning fiercely, with a gaping hole in her bows. As the Broke approaches she fires her foremost gun. The Broke opens fire in reply, and sends her third torpedo into her. (Plan 39.)

Meanwhile, the Swift had continued the chase eastward towards the barrage. Her wireless was out of action, the stokers' mess deck was flooded, and on approaching the barrage, Commander Peck decided not to cross it, and turned back. He had lost touch with the Broke, and began switching his fighting lights off and on till at last he regained touch with her. The action was over—darkness, flames, uncertainty. Now there is time to look round.

The *Broke's* position was a dangerous one. She had gradually drifted down on the blazing destroyer, and found herself lying alongside a burning wreck which might blow up at any minute. But the

 $^{^{1}}$ "Narrowly missed ramming." The Swift just missed V.81 and later G.85.

² Possibly two of the leading group who had circled round.

Mentor was speeding up from Dover with the Lydiard and Lucifer¹; she reached the scene at 1.20 p.m., and had begun picking up German survivors when the Broke signalled to her to tow her astern off the blazing wreck. The Swift came up shortly afterwards. The ship that the Broke had rammed was sinking.² The other was blazing like a vast torch illuminating the night. It remained only to pick up survivors. The Swift picked up six officers and 50 men; the Lydiard three officers and 27 men from G.85, and three men from G.42. In the stress of the action they had lost all count of their position, and the Swift gave orders for all to remain where they were till daylight. As dawn came creeping in she proceeded with the Lucifer to pass round the west end of the barrage. The Mentor and Lydiard remained by the Broke, which drifted through the barrage and found herself N. 60 E., half a mile from 2A buoy. Tugs were coming up to bring her in.

Captain (D) arrived in the Myngs, and sent the Swift with the

Lucifer into Dover. This was the end of the night.

In the Swift, one man had been killed and five wounded. The Broke had suffered more heavily, and had lost 21 killed and 24 wounded, most of them by the shell which burst in the boiler room. These losses were small in comparison with the results. A sharp punishment had been inflicted on the German flotilla, which put an end to destroyer raids for nearly a year. Honours followed. Commanders Ambrose Peck and Edward Ratcliffe Evans, C.B., were promoted to Post Captain and awarded the D.S.O. In the Swift, Lieutenant Robert D. Harman (N), Lieutenant Henry A. Simpson (1st and G), Mr. Henry Turner (gunner), and Surgeon-Probationer J. S. Westwater received D.S.Cs. In the Broke, Lieutenant G. V. Hickman (N) and Lieutenant M. C. Despard (1st and G), Mr. Frederick Grinney (gunner), and Surgeon-Probationer C. T. Helsham, R.N.V.R., and Mr. Donald Gyles, Midshipman, R.N.R., received D.S.Cs.

Lieut.-Commander Arthur J. Landon, who had arrived in time to render help, received a mention. Such was the famous action of the *Swift* and *Broke*. It was not till February, 1918, that German destroyers again ventured into the Straits.⁴ (Plans 37, 38, 39.)

310. The Dover Shore Defences, April 21.—The bombardment of the Kent coast near Dover late on the night of April 20 made it imperative to settle the question raised by Admiral Bacon of the Dover shore defences. The Admiralty lost no time, and on the day

² Lucifer (s) says she sank at 1.18 a.m.

4 M.05014/17 (Admiral Bacon's report and Report of Enquiry), H.S.A.

308/586. Logs and Signal Logs. See Appendix M.

^{1 12.58} a.m. "proceeding with 2nd Division towards gun flashes."

³ M.05014/17 (original), p. 61, 92. This was printed and contains the reports of Admiral Bacon, Commander Peck and Commander Evans, and of the Enquiry.

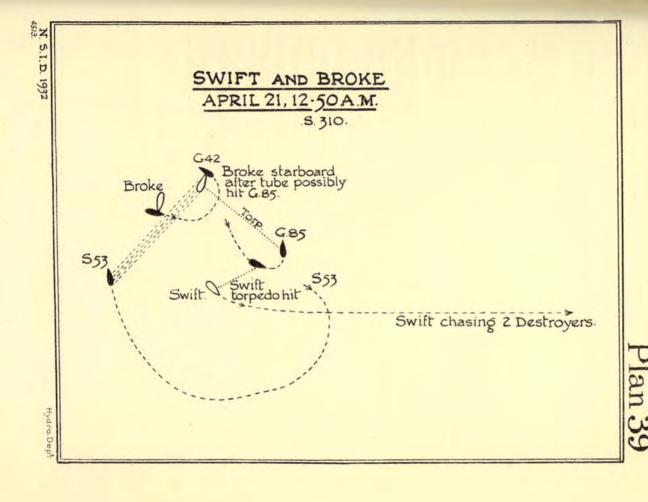
after the bombardment a conference was held in the Chief of Staff's room. In addition to the Chief of Staff (Vice-Admiral Sir Henry Oliver), there were present Vice-Admiral Bacon, Rear-Admiral Thomas Jackson (Director of Operations Division), General Sir F. C. Shaw (Home Forces), General Sir Guthrie Smith, Colonel T. A. Carte, and Colonel C. Shaw (War Office), Colonel A. Hinde Eastern Command), and General Bickford (Officer Commanding Dover Garrison). After considerable discussion it was agreed that the shore guns of Dover should open fire on all enemy vessels within range of the searchlights, and that, in the event of an actual bombardment of the town or harbour, the shore defences should open fire and continue firing until the Vice-Admiral asked them to cease.1

311. Bombardment, Dunkirk, April 24.—Although the events of the night of April 20-21 completely discouraged the Zeebrugge flotillas from attempting another raid on Dover Straits for several months, they continued active, and it was only three days before they were again in evidence not far off. On April 24 a detachment of them approached the town of Dunkirk, about 1.20 a.m., and bombarded it for some ten minutes, doing considerable damage to the houses on the front and sending up a magnificent pyrotechnic display of star shell. The monitor Lord Clive was anchored with the destroyer Greyhound in the Potje,2 some 7 miles to the eastward, and, seeing the gunflashes at 1.12 p.m., at once weighed and made for the Zuidcoote Pass to cut off the enemy's retreat. They passed through at 1.45 a.m., and were sighted by the French destroyer Etendard, which opened fire, but was promptly torpedoed and sunk. It was pitch dark; the Lord Clive, a mile off, caught only a glimpse of two of them at 1.48 a.m., and opened fire with her 6-in. guns. The Germans raced through the Pass; 13 minutes later a searchlight suddenly blazed out in the West Deep, and a burst of firing took place some 3 miles to the north-east. The Germans were engaging a French trawler, Notre Dame de Lourdes, but, though damaged, she got back to Dunkirk with one killed and four wounded.3 Three French torpedo boats were patrolling all this time to seaward of Dunkirk, but apparently mistook the firing for an air raid.

312. Bombardment, Ramsgate, April 27.—Only two days later German destroyers again appeared off the English coast. This time they gave Dover a wide berth. Ten minutes after midnight on the night of April 26-27 a group of them appeared off the coast of Thanet and fired a number of shells into Margate, Broadstairs, and Ramsgate. The night was pitch dark. Suddenly a star shell burst between the Marshal Ney and Ramsgate, and a few seconds later a number of

¹ M.04368/17. ² Lat. 51° 6½′ N., 2° 31′ E.

³ H.S.A.308/684.



flashes were seen in an easterly direction from the monitor. Her guns' crews were at once closed up, but the ship was swinging, and only two of the guns would bear. She fired eight rounds¹ in four two-gun salvoes at ranges varying from 6,000–7,200 yards. The North Foreland batteries, too, opened fire, but could only get off four rounds of 6-in. while their guns were bearing. In the meanwhile, in the course of some three or four minutes, the enemy had got off some 200 rounds and three star shells. Some of the projectiles fell within a few yards of the *Marshal Ney*, but most of them passed shorewards, killing one man and one woman, injuring three people, and damaging a score of houses.

The only other British war vessel to sight the enemy was T.B.4. Shortly after midnight she was in position 51° 17½' N., 0° 29½' E.,2 steering N. 35° E. at 10 knots when she saw the first star shell burst over Ramsgate. Like the Marshal Ney, this was the first intimation she had received of the presence of the enemy; a light south-west breeze was blowing, and to the northward heavy clouds obscured the horizon. Immediately following the star shell the enemy opened fire on Ramsgate, and T.B.4 counted the gunflashes of four destroyers. At 12.12 a.m. she reported by Emergency Code four or five enemy destroyers north-east of Ramsgate. Not wishing to embarrass or hinder the firing either of the Marshal Ney or of the land batteries, her Captain, Lieutenant D. S. McGrath, gave no sign of his presence, but, slipping through a prohibited area, made to the N.N.E. in the hope that they would stay long enough to enable him to attack them with torpedoes. Meanwhile, Admiral Bacon had ordered the reinforcement of the Downs patrol at once with two boats, and given the order for destroyers to slip and proceed (12.15 a.m.). But by this time the enemy had turned north-east, and were racing away at full speed. At the end of the three or four minutes' bombardment they disappeared in the direction of the Elbow buoy, and nothing further was seen of them.3 They had done little enough, but no one at Dover or Ramsgate could complain of the monotony of war.

¹ Two common and six shrapnel.

² Near N.W. Goodwin buoy.

³ M.05678/17; H.S.A.308/690.

CHAPTER XV.

HIGH SEA FLEET SUBMARINES, SOUTH-WEST APPROACH.

APRIL 1917. (Plans 41, 41A, 42, 42A.)

313. Submarine Warfare, April, 1917.—The unrestricted submarine campaign beginning in February, 1917, increased rapidly in intensity, and in April reached its culminating point. During the month no fewer than 24 High Sea Fleet submarines and two Flanders submarines, U.C.66 and U.C.30, visited the North Atlantic and the waters south and west of Ireland, and sank 136 vessels, aggregating 365.851 tons. These consisted of 99 homeward-bound vessels of 305,102 tons, 19 outward-bound vessels of 46,208 tons, seven fishing vessels of 1,202 tons, six vessels of 8,778 tons whose destinations are not stated in the reports, four vessels of 3,105 tons which were destroyed in the North Sea by submarines on passage to and from the westward, and one vessel, the Bandon (1,456 tons), bound from Liverpool to Cork destroyed by U.C.33 on April 13. They include, too, three vessels1 totalling 7,822 tons which were sunk off the north-west coast of Portugal by U.522 between April 16 and 19. while she was on passage from the Mediterranean, and the Norwegian S.V. Acadia (1.665 tons), which she sank on April 23 at 9 a.m. in 55° 43' N., 9° 27' W. U.46 had sailed on March 12 (see S.225) and was followed by U.60.

314. Cruise of "U.60."—U.60 (Kaptlt. Schuster) left Heligoland on March 26. She was in the South-West Approach on April 4, and about 9 a.m. in 50° 30′ N., 10° 1′ W., fired 24 rounds at the Italian S.S. Domingo (2,131 tons), bound from Naples to Manchester, and then sank her with two torpedoes before making off in a north-westerly direction.

U.60's next victim was the homeward-bound defensively armed British S.S. Canadian (9,309 tons), the largest vessel but one³ sunk off the Irish coast during the month. Torpedoed without warning on April 4 at 11.45 p.m. in 51° 36′ N., 10° 48′ W., some 25 miles west of Bantry Bay, she remained afloat until 1.15 a.m., April 5. Her survivors were picked up by H.M.S. Snowdrop, but her master,

Mr. W. H. Bullock, was lost. Next day, April 6, at 5 p.m., in 51° 58′ N., 14° 4′ W., U.60 sank the Norwegian S.V. Marion (1,587 tons), outward bound Limerick to Pensacola. On April 7 at 12.45 p.m. in 52° 30′ N., 14° 40′ W., she torpedoed without warning the British S.S. Salmo (1,721 tons) homeward bound from Oporto to Liverpool.

Nine days passed before she claimed another victim. This was the British S.S. Queen Mary (5.658 tons), bound from New York to Le Havre, which was torpedoed without warning on April 16 at 10.10 p.m. in 51° 52' N., 14° 18' W. The Queen Mary sank in 15 minutes with the loss of nine lives. Two days later, on April 18, at 7.30 a.m., in 51° 38' N., 14° W., it was possibly U.60 that sank without warning and with the loss of six lives the defensively armed British S.S. Rhydwen (4,799 tons), bound from Galveston to Cardiff with a cargo of wheat. Next day, April 19, at 2 p.m., in 52° 2' N., 13° 38' W., she sank without warning the British S.S. Howth Head (4,440 tons). bound from New Orleans to Belfast. An hour later, April 19, at 3 p.m., in 51° 25' N., 14° 5' W., she met the British S.S. Thermidor and chased her to the north-westwards until she was rescued at 7.45 p.m. by a patrol vessel. Next day, April 20, at 1.30 p.m., in 52° 10′ N., 14° W., she torpedoed, once again without warning, the British S.S. Torr Head (5,911 tons). Her final victim was the Danish S.V. Svanen, which she sank on April 23 at 5.30 p.m., in 60° 52' N., 1° 35' W. On April 26 she reached Heligoland, having sunk altogether 10 vessels, totalling 38,000 tons.

315. Cruise of "U.55." - On April 4, at 9.30 a.m., U.55 (Kaptlt Wilhelm Werner), which had left Heligoland on March 30, met in 54° 8' N., 10° 54' W., the Danish schooner H. B. Linnemann (404 tons) bound from Goteburg to Casablanca with timber. Hit by some 20 shells and with her spars and rigging shot away, she was kept affoat by her cargo, and eventually towed in by armed trawlers. She remains another instance of U.55's callousness, for her master and mate were killed by shell, and of the remaining seven, two died in the boat and five were injured. U.55 went off to the S.S.W., and on April 5, at 3.50 p.m., in 50° 10' N., 14° W., torpedoed the Norwegian S.S. Vilja (1,149 tons) homeward bound from Dakar. The next day, April 6,* at 4.30 p.m., in 50° 14' N., 14° W., she suddenly appeared close on the port bow of the British S.S. Hillhouse (3,049 tons), going from Seville to Troon. The weather was stormy and sea rough, and a torpedo missed the ship ahead by about a yard. The submarine opened fire, and the ship replied with a 12-pdr. gun and escaped, though she could only steam some 7 knots. U.55's next appearance was on April 8. At 5.35 a.m., in 48° 58' N., 10° 25' W., the British S.S. Carmarthenshire (7,823 tons), armed with a 4.7-in. gun,

¹ Gr. S.S. Crios (4,116 tons), on April 16 in 38° 25′ N., 9° 13′ W.: Brit. S.S. Caithness (3,500 tons), on April 19, in approximately 44° N., 10° W.; Portuguese S.V. Senhora Da Conceicao (206 tons), on April 19 in 43° 45′ N., 9° 51′ W.

 $^{^2}$ U.52 was engaged by the Q ship Heather, on April 21, 8.15 a.m. (see S. 319).

³ San Hilario (10,157 tons), sunk by U.43, April 20.

^{*} On April 6, 3.15 p.m., in 50° 2′ N., 13° 58′ W., she sank the British S.S. *Vine Branch*, 3,442 tons, Valparaiso to Liverpool (lost without trace). H.S./Q.14.